DCR-HC1000/HC1000E

RMT-831

SERVICE MANUAL

LEVEL 2

Ver 1.2 2005. 06
Revision History

How to use Acrobat Reader

Photo : DCR-HC1000

DCR-HC1000
US Model
Canadian Model
Korea Model
Japanese Model

DCR-HC1000E
AEP Model
UK Model
East European Model
Australian Model
Chinese Model

DCR-HC1000/ HC1000E
E Model
Tourist Model

Z (Z200) MECHANISM

Link

SPECIFICATIONS	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAMS	REPAIR PARTS LIST
DISASSEMBLY	SCHEMATIC DIAGRAMS	

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (9-876-752-51).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (9-876-752-41). (EXCEPT J MODEL)
- For MECHANISM ADJUSTMENTS, refer to the “DV MECHANICAL ADJUSTMENT MANUAL Z (Z200) MECHANISM ” (EXCEPT J: 9-876-724-11) (J: 9-876-724-01).
- Reference number search on printed wiring boards is available.
- TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

On the DB-017 board and VC-366 board

This service manual provides the information that is premised the circuit board replacement service and not intended repair inside the DB-017 board and VC-366 board.
Therefore, schematic diagram, printed wiring board, waveforms, mounted parts location and electrical parts list of the DB-017 board and VC-366 board are not shown.
The following pages are not shown.

Schematic diagram	Pages 4-37 to 4-78	Mounted parts location	Pages 4-117 to 4-119
Printed wiring board	Pages 4-107 to 4-114	Electrical parts list	Pages 5-25 to 5-36

Mini DV Digital Video Cassette

DIGITAL VIDEO CAMERA RECORDER

SONY

DCR-HC1000/HC1000E
9-876-752-31

Sony EMCS Co.

2005F1600-1
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Published by DI Technical Support Department

ENGLISH | JAPANESE

Self Diagnosis Supported model

HANDYCAM

InfoLITHIUM F SERIES

MEMORY STICK TM

SPECIFICATIONS

System

Video recording system
2 rotary heads, Helical scanning system

Still image recording system
Exif Ver. 2.2 *1
*1 "Exif" is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association). Files in this format can have additional information such as your camcorder's setting information at the time of recording.

Audio recording system
Rotary heads, PCM system
Quantization: 12 bits (Fs 32 kHz, stereo 1, stereo 2), 16 bits (Fs 48 kHz, stereo)

Video signal
DCR-HC1000:
NTSC color, EIA standards
DCR-HC1000E:
PAL color, CCIR standards

Usable cassette
Mini DV cassette with the Mini DV mark printed

Tape speed
SP: Approx. 18.81 mm/s
LP: Approx. 12.56 mm/s

Recording/playback time (using a DVM60 cassette)
SP: 60 min
LP: 90 min

Fast forward/rewind time (using a DVM60 cassette)
Approx. 2 min 40 s

Viewfinder
Electric viewfinder (color)

Image device
3.8 mm (1/4.7 type) 3CCD (Charge Coupled Device)
Gross: Approx. 1 070 000 pixels
Effective (still): Approx. 1 000 000 pixels
Effective (movie): Approx. 690 000 pixels

Lens
Carl Zeiss Vario-Sonnar T*
Combined power zoom lens
Filter diameter: 37 mm (1 1/2 in.)
12 × (Optical), 150 × (Digital)
F = 1.6 ~ 2.8

Focal length
3.6 - 43.2 mm (5/32 - 1 3/4 in.)
When converted to a 35 mm still camera
In CAMERA-TAPE:
49 - 588 mm (1 15/16 - 23 1/4 in.)
In CAMERA-MEMORY:
41 - 492 mm (1 5/8 - 19 3/8 in.)

Color temperature
[AUTO], [ONE PUSH], [INDOOR] (3 200 K), [OUTDOOR] (5 800 K)

Minimum illumination
5 1x (lux) (F 1.6)

Input/Output connectors

Audio/Video input/output
10-pin connector
Input/output auto switch
Video signal: 1 Vp-p, 75Ω (ohms), unbalanced
Luminance signal: 1 Vp-p, 75Ω (ohms), unbalanced
DCR-HC1000:
Chrominance signal: 0.286 Vp-p, 75 Ω (ohms), unbalanced
DCR-HC1000E:
Chrominance signal: 0.3 Vp-p, 75 Ω (ohms), unbalanced
Audio signal: 327 mV (at output impedance more than 47 kΩ (kilohms)), Input impedance more than 47 kΩ (kilohms), Output impedance with less than 2.2 kΩ (kilohms)

DV input/output
4-pin connector

LANC jack
Stereo mini-minijack (∅ 2.5 mm)

USB jack
mini-B

MIC jack (FRONT/REAR)
Minijack, 0.388 mV low impedance with DC 2.5 to 3.0 V, output impedance 6.8 kΩ (kilohms) (∅ 3.5 mm), Stereo type

LCD screen

Picture
6.2 cm (2.5 type)

Total dot number
211 200 (960 22 0)

General

Power requirements
DC 7.2 V (battery pack)
DC 8.4 V (AC Adaptor)

Average power consumption (when using the battery pack)
DCR-HC1000:
During camera recording using the viewfinder
4.6 W
During camera recording using the LCD
5.1 W
DCR-HC1000E:
During camera recording using the viewfinder
4.3 W
During camera recording using the LCD
4.8 W

Operating temperature
0° C to 40° C (32° F to 104° F)

Storage temperature
–20° C to +60° C (–4° F to +140° F)

Dimensions (approx.)
101 × 78 × 158 mm (4 × 3 1/8 × 6 1/4 in.) (w/h/d)

Mass (approx.)
780 g (1 lb 11 oz) main unit only
890 g (1 lb 15 oz) including the NP-FF71 rechargeable battery pack, DVM60 cassette and lens cap.

Supplied accessories
See page 5-17.

AC Adaptor AC-L25A/L25B

Power requirements
AC 100 - 240 V, 50/60 Hz

Current consumption
0.35 - 0.18 A

Power consumption
18 W

Output voltage
DC 8.4 V, 1.5 A

Operating temperature
0° C to 40° C (32° F to 104° F)

Storage temperature
–20° C to +60° C (–4° F to +140° F)

Dimensions (approx.)
56 × 31 × 100 mm (2 1/4 × 1 1/4 × 4 in.) (w/h/d) excluding the projecting parts

Mass (approx.)
190 g (6.7 oz) excluding the power cord

Rechargeable battery pack (NP-FF71)

Maximum output voltage
DC 8.4 V

Output voltage
DC 7.2 V

Capacity
11.2 Wh (1 560 mAh)

Dimensions (approx.)
40.8 × 24.1 × 49.1 mm
(1 5/8 × 31/32 × 1 15/16 in.) (w/h/d)

Mass (approx.)
90 g (3.2 oz)

Operating temperature
0° C to 40° C (32° F to 104° F)

Type
Lithium ion

Design and specifications are subject to change without notice.

自己診断搭載機種 HANDYCAM InfoLITHIUM F SERIES MEMORY STICK ™

概略仕様

◆システム

録画方式	回転2ヘッドヘリカルスキャン
静止画記録方式	Exif Ver.22*1
録音方式	回転2ヘッド 12ビット32kHz （ステレオ1、ステレオ2） 16ビット48kHz（ステレオ）
映像信号	NTSCカラー、EIA標準方式
使用可能カセット	Mini DV マークのついたミニDVカセット
テープ速度	SP：約18.81mm/秒 LP：約12.56mm/秒
録画・再生時間	SP：60分（DVM60使用時） LP：90分（DVM60使用時）
早送り、巻き戻し時間	約2分40秒（DVM60使用時）
ファインダー	電子ファインダー：カラー
撮像素子	3.8mm（1/4.7型）3CCD固体撮像素子 総画素数：約107万画素 静止画時有効画素数：約100万画素 動画時有効画素数：約69万画素
ズームレンズ	カールツァイス　バリオゾナーT* 12倍（光学）、150倍（デジタル） f=3.6～43.2mm （35mmカメラ換算では 「撮る-テープ」時： 49～588mm 「撮る-メモリー」時： 41～492mm） F1.6～2.8 フィルター径37mm
色温度切り換え	［オート］、［ワンプッシュ］、［オクナイ］（3200K）、［オクガイ］（5800K）
最低被写体照度	11lx（ルクス）（F1.6）

*1（社）電子情報技術産業協会（JEITA）にて制定された、撮影情報などの付帯情報を追加することができる静止画用のファイルフォーマット。

◆入・出力端子

映像・音声端子	10ピン特殊コネクター 入力／出力自動切り換え 映像：1Vp-p、75Ω不平衡 Y出力　1Vp-p 75Ω不平衡 C出力　0.286Vp-p 75Ω不平衡 音声：327mV（47kΩ負荷時）、入力インピーダンス47kΩ以上、出力インピーダンス22kΩ以下
USB端子	mini-B
LANC端子	ステレオミニミニジャック（ø2.5）
MIC（マイク）入力端子（FRONT/REAR）	ステレオミニジャック（ø3.5）
DV端子	i.LINK（IEEE1394.4ピンコネクターS100）

◆液晶画面

画面サイズ	6.2cm（2.5型）
総ドット数	211200ドット 横960×縦220

◆電源部、その他

電源電圧	バッテリー端子入力7.2V DC端子入力8.4V
消費電力	4.6W（ファインダー使用時、明るさ標準） 5.1W（液晶画面使用時、明るさ標準）
動作温度	0℃～+40℃
保存温度	−20℃～+60℃
外形寸法	101×78×158mm （最大突起部を除く）（幅×高さ×奥行き）
本体質量	約780g（本体のみ）
撮影時総質量	約890g （バッテリーNP-FF71、テープ（DVM60）、レンズキャップ含む。）
付属品	5-18ページをご覧ください。

◆ACアダプター　AC-L25A/L25B

電源	AC100～240V、50/60Hz
消費電力	18W
定格出力	DC8.4V、1.5A
動作温度	0℃～+40℃
保存温度	−20℃～+60℃
外形寸法	約56×31×100mm （最大突起部をのぞく） （幅×高さ×奥行き）
質量	約190g（本体のみ）

◆リチャージャブルバッテリーパックNP-FF71

最大電圧	DC8.4V
公称電圧	DC7.2V
容量	11.2wh（1560mAh）
最大外形寸法	約40.8×24.1×49.1mm （幅×高さ×奥行き）
質量	約90g
使用温度	0℃～+40℃
使用電池	Li-ion

本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Keep the temperature of the soldering iron around 270˚C during repairing.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

サービス、点検時には次のことにご注意下さい。

1. 注意事項をお守り下さい。

サービスのとき特に注意を要する箇所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。　これらの注意書きおよび取扱説明書等の注意事項を必ずお守り下さい。

2. 指定部品のご使用を

セットの部品は難然性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。　特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。

3. 部品の取付けや配線の引きまわしは もとどおりに

安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。　また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。

4. サービス後は安全点検を

サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした箇所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。

5. チップ部品交換時の注意

・取り外した部品は再使用しないで下さい。
・タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。

注　意
電池の交換は，正しく行わないと破裂する可能性があります。
電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

6. フレキシブルプリント基板の取扱について

・コテ先温度を270℃前後にして行なって下さい。
・同一パターンに何度もコテ先を当てないで下さい。
（3回以内）
・パターンに力が加わらないよう注意して下さい。

無鉛半田について

無鉛半田を使用している基板には，無鉛（Lead Free）を意味するレッドフリーマークがプリントされています。
（注意：　基板サイズによっては，無鉛半田を使用していてもレッドフリーマークがプリントされていないものがあります）

：レッドフリーマーク

無鉛半田には，以下の特性があります。

・ 融点が従来の半田よりも約40℃高い。
従来の半田こてをそのまま使用することは可能ですが，少し長めにこてを当てる必要があります。
温度調節機能のついた半田こてを使用する場合，約350℃に設定して下さい。
注意：半田こてを長く当てすぎると，基板のパターン（銅箔）がはがれてしまうことがありますので，注意して下さい。
・ 粘性が強い
従来の半田よりも粘性が強いため，IC端子などが半田ブリッジしないように注意して下さい。
・ 従来の半田と混ぜて使用可能
無鉛半田には無鉛半田を追加するのが最適ですが，従来の半田を追加しても構いません。

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Pages from 5-25 to 5-36 are not shown.

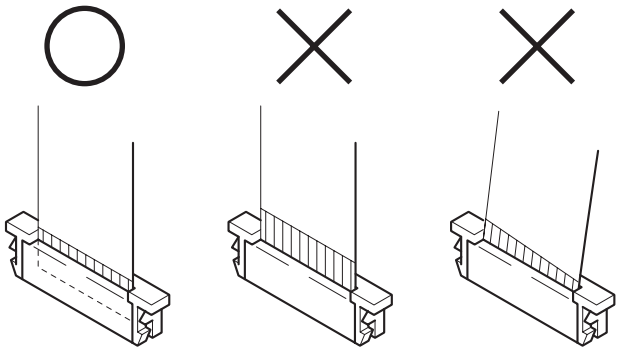
SECTION 1
SERVICE NOTE

ENGLISH | JAPANESE

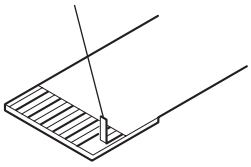
1-1. SERVICE NOTE

1. NOTE FOR REPAIR

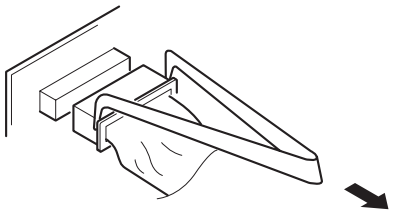
Make sure that the flat cable and flexible board are not cracked of bent at the terminal.
Do not insert the cable insufficiently nor crookedly.



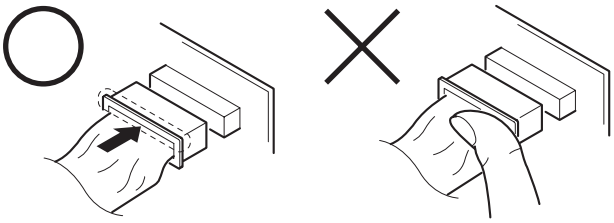
Cut and remove the part of gilt which comes off at the point. (Take care that there are some pieces of gilt left inside)



When remove a connector, don't pull at wire of connector. Be in danger of the snapping of a wire.



When installing a connector, don't press down at wire of connector. Be in danger of the snapping of a wire.



2. POWER SUPPLY DURING REPAIRS

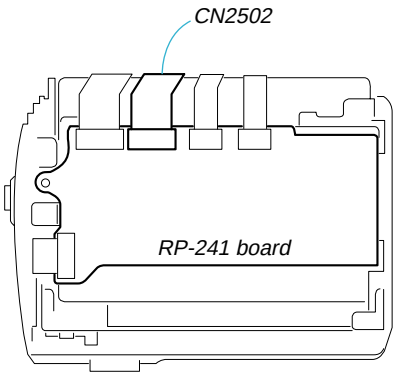
In this unit, about 10 seconds after power is supplied to the battery terminal using the regulated power supply (8.4V), the power is shut off so that the unit cannot operate.
This following two methods are available to prevent this. Take note of which to use during repairs.

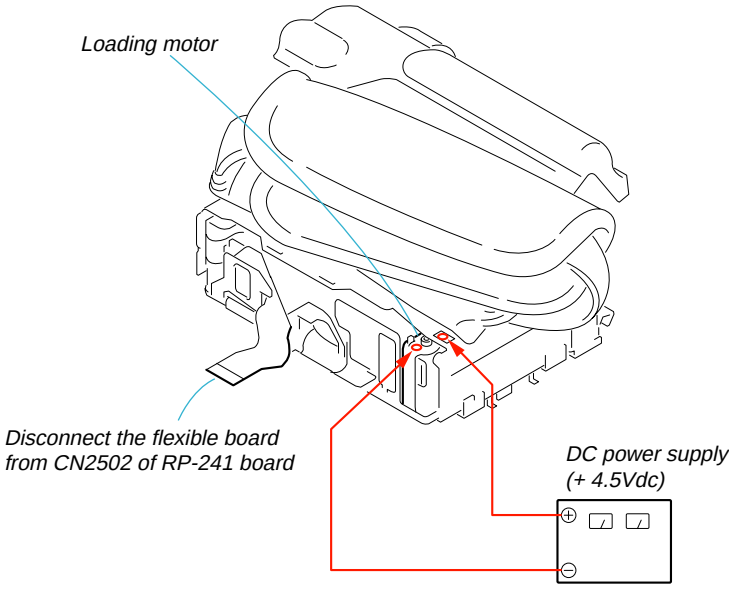
Method 1.
Use the AC power adaptor.

Method 2.
Connect the servicing remote commander RM-95 (J-6082-053-B) to the LANC jack, and set the commander switch to the “ADJ” side.

3. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

① Remove the grip block section, cabinet (L).
② Remove the grip block section from the cabinet (L).
③ Remove the grip (bottom) cabinet from the grip block section.
④ Remove the grip (R) cabinet assembly from the grip block section.
⑤ Remove the grip hinge assembly from the grip block section.
⑥ Disconnect CN2502 (27P, 0.3mm) of RP-241 board.
⑦ Open the cassette lid.
⑧ Supply +4.5V from the DC power supply to the loading motor and unload with pressing the cassette compartment.



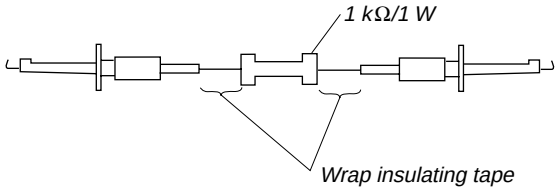


4. DISCHARGING OF THE FLASHLIGHT POWER SUPPLY CAPACITOR

The power supply capacitor (ST-106 board C5605) of the flash unit is charged up to the maximum 300V potential.
There is a danger of electric shock by this high voltage when the capacitor is handled by hand. The electric shock is caused by the charged voltage which is kept without discharging when the main power of the unit is simply turned off. Therefore, the remaining voltage must be discharged as described below.

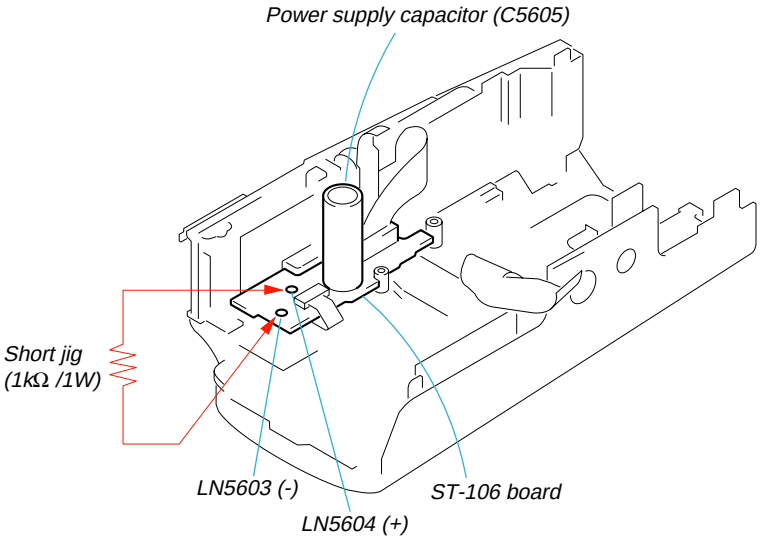
4-1. PREPARING THE SHORT JIG

To preparing the short jig. a small clip is attached to each end of a resistor of 1kΩ/1W (1-215-869-11).
Wrap insulating tape fully around the reads of the resistor to prevent electric shock.



4-2. DISCHARGING THE CAPACITOR

① Remove the cabinet (L) assembly and the grip assembly.
② Remove the MS-220 board.
③ Remove the VC-366 board.
④ Remove the JK-271 board.
⑤ Remove the DB-017 board.
⑥ Remove the center frame.
⑦ Remove the lens assembly.
⑧ Remove the Battery holder and the EVF block.
⑨ Short-circuit between LN5604(+) and LN5603(-) of the ST-106 board with short jig about 10 seconds.



1-2. SELF-DIAGNOSIS FUNCTION

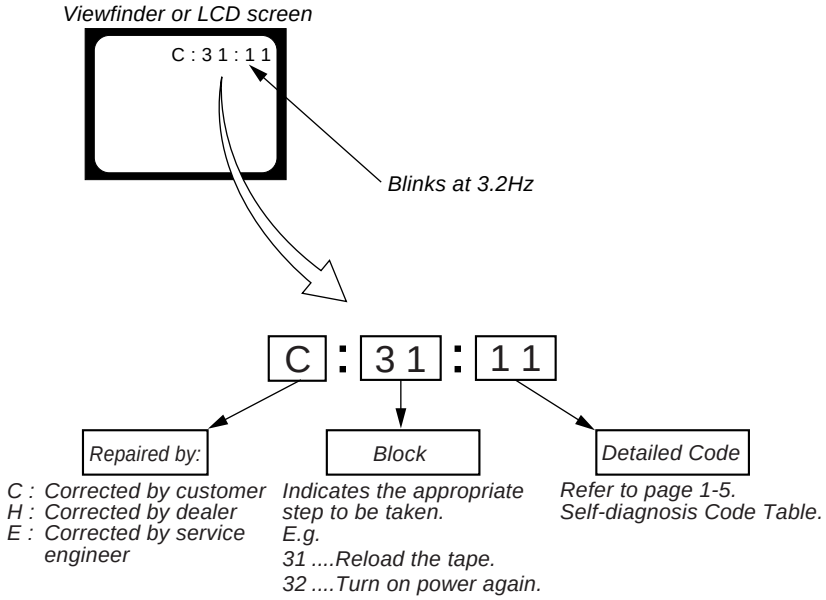
1. SELF-DIAGNOSIS FUNCTION

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder, or LCD screen what to do. This function consists of two display; self-diagnosis display and service mode display.

Details of the self-diagnosis functions are provided in the Instruction manual.

2. SELF-DIAGNOSIS DISPLAY

When problems occur while the unit is operating, the counter of the viewfinder or LCD screen consists of an alphabet and 4-digit number, which blinks at 3.2Hz. This 5-character display indicates the "repaired by:", "block" in which the problem occurred, and "detailed code" of the problem.


Viewfinder or LCD screen
C : 3 1 : 1 1
Blinks at 3.2Hz
C : 31 : 11
Repaired by:
Block
Detailed Code
C : Corrected by customer
H : Corrected by dealer
E : Corrected by service engineer
Indicates the appropriate step to be taken.
E.g.
31 ....Reload the tape.
32 ....Turn on power again.
Refer to page 1-5.
Self-diagnosis Code Table.

Note: The "self-diagnosis display" data will be kept even if the lithium battery (BT1001 of FP-953 flexible board) is removed.

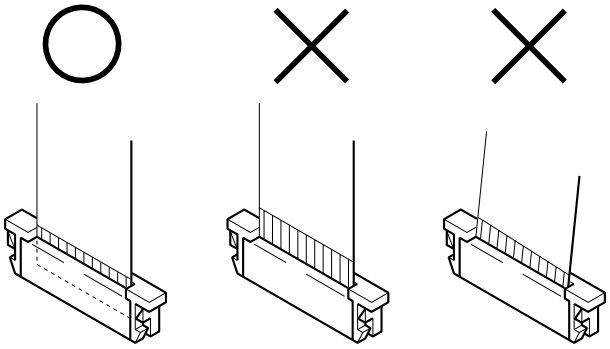
3. SELF-DIAGNOSIS CODE TABLE

Self-diagnosis Code					Symptom/State	Correction
Repaired by:	Block Function		Detailed Code			
C	0	4	0	0	Non-standard battery is used.	Use the info LITHIUM battery.
C	2	1	0	0	Condensation.	Remove the cassette, and insert it again after one hour.
C	2	2	0	0	Video head is dirty.	Clean with the optional cleaning cassette.
C	3	1	1	0	LOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	1	1	UNLOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	2	0	T reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3	1	2	1	Winding S reel fault when counting the rest of tape.	Load the tape again, and perform operations from the beginning.
C	3	1	2	2	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2	3	S reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2	4	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	3	0	FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3	1	4	0	FG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3	1	4	2	FG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3	2	1	0	LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	1	1	UNLOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	0	T reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	1	Winding S reel fault when counting the rest of tape.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	2	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	3	S reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2	4	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	3	0	FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4	0	FG fault when starting drum	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4	2	FG fault during normal drum operations	Remove the battery or power cable, connect, and perform operations from the beginning.
E	2	0	0	0	Data on A page or D page are rewriten.	Make data on A page and D page correct value.
E	6	1	0	0	Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus MR sensor (Pin ㉕, ㉖ of CN1010 of VC-366 board) when focusing is performed when the focus ring is rotated in the focus manual mode, and the focus motor drive circuit (IC5102 of VC-366 board) when the focusing is not performed.
E	6	1	1	0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom MR sensor (Pin ㉓, ㉔ of CN1010 of VC-366 board) when zooming is performed when the zoom lever is operated and the zoom motor drive circuit (IC5102 of VC-366 board) when zooming is not performed.
E	6	2	0	0	Steadyshot function does not work well. (With pitch angular velocity sensor output stopped.)	Inspect pitch angular velocity sensor (SE520 of SE-149 board) peripheral circuits.
E	6	2	0	1	Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE521 of SE-149 board) peripheral circuits.
E	9	1	0	1	Abnormality when the power supply capacitor of the flash unit is being charged.	Checking or replacement of the flash unit.

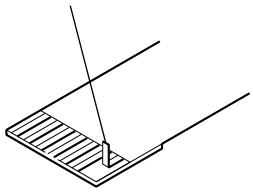
1–1. サービスノート

1. 修理時の注意

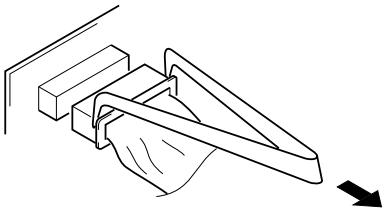
フラットケーブルおよびフレキシブル基板の端子面に欠け，折れ等がないことを確認する。
また，コネクタへの接続は，差し込み不足や斜め差しにならないように注意する。



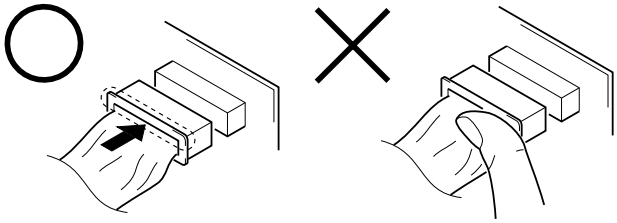
先端の剥がれたメッキ部はカットして除去する。
（メッキ破片がコネクタ内に残っている場合もあるので注意）



コネクタを取り外す時に，線材部（極細）を持って引っ張ると断線する恐れがありますので，絶対に線材部（極細）を持って引っ張らないで下さい。



線材部（極細）を押さえながらコネクタを差し込むと，線材部（極細）が断線する恐れがありますので，絶対に線材部（極細）には負担をかけないで下さい。



2.　修理／調整時の電源供給について

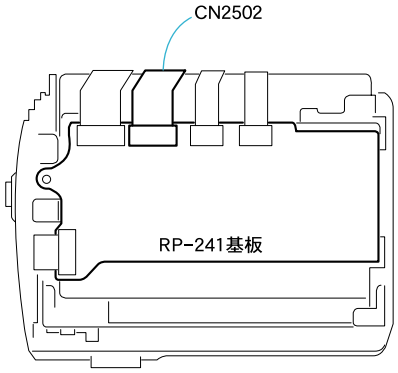
本機では，安定化電源（8.4Vdc）からバッテリー端子に電源を供給した場合，約10秒後にシャットオフし，動作しなくなります。
これを避けるため，下記のいずれかの方法を用いてください。

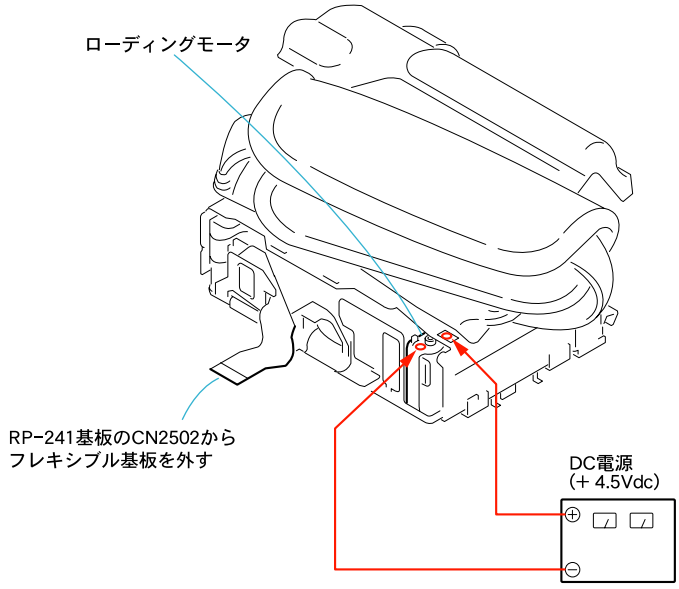
方法1：
ACアダプタを使用する。

方法2：
調整リモコンRM-95（J-6082-053-B）を本機のLANCジャックに接続し，HOLDスイッチをADJ側にする。

3.　イジェクトしない時のカセット取出し方法（強制イジェクト）

① キャビネット（L）組立とグリップ組立を外す。
② キャビネット（L）組立からグリップ組立を外す。
③ グリップ組立からキャビネット（底）を外す。
④ グリップ組立からキャビネット（ヒンジ側）を外す。
⑤ グリップ組立からグリップヒンジを外す。
⑥ RP-241基板のCN2502（27P, 0.3mm）を外す。
⑦ カセット蓋を開く。
⑧ カセコン組立を押えながら,DC電源より+4.5Vをローディングモータに加え,アンローディングさせる。



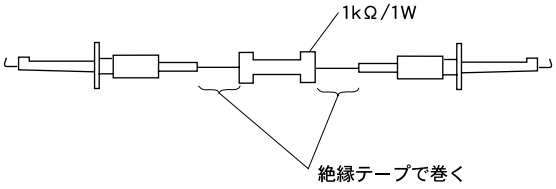


4. フラッシュ電源コンデンサの放電

フラッシュユニットの電源コンデンサ(ST-106基板C5605)は最大300Vの電圧で充電されています。
この高電圧で充電されたコンデンサに手を触れた場合,電気ショックを受けます。この高電圧は単にセットの電源を切っただけでは放電されず,残留しています。このため,下記の方法で,残留電圧を放電してください。

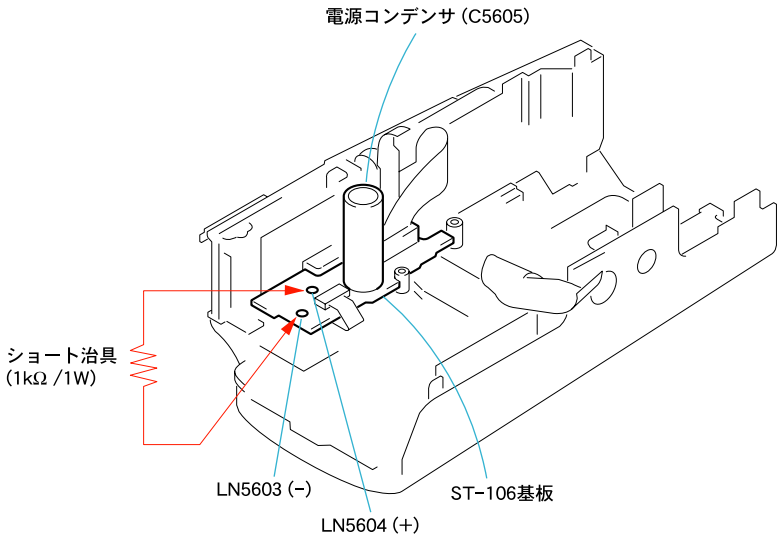
4-1. ショート治具の準備

ショート治具は1kΩ/1W抵抗 (1-215-869-11) の両端に小型のクリップを接続して作成します。
抵抗器は絶縁テープで完全に覆い電気ショックを受けないようにしてください。



4-2. コンデンサの放電

① キャビネット（L）組立とグリップ組立を外す。
② MS-220基板を外す。
③ VC-366基板を外す。
④ JK-271基板を外す。
⑤ DB-017基板を外す。
⑥ センターフレームを外す。
⑦ レンズ組立を外す。
⑧ バッテリーホルダーとEVFブロックを外す。
⑨ ST-106基板のLN5604 (+) とLN5603 (-) をショート治具で約10秒間接続する。



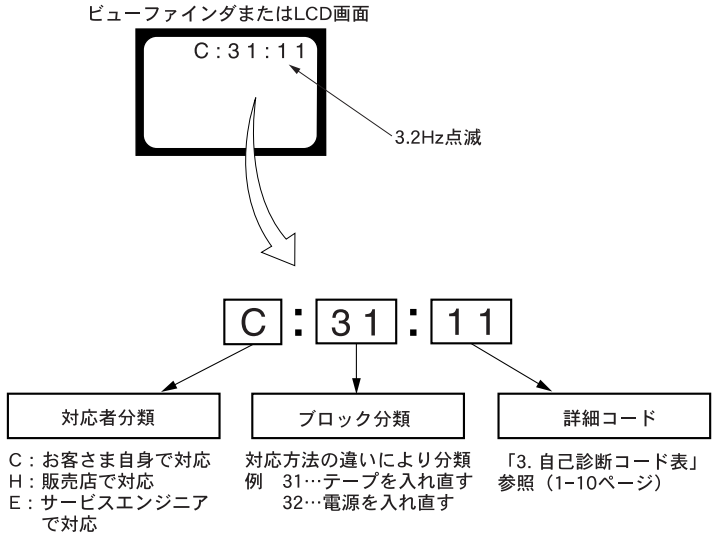
1-2. 自己診断機能

1. 自己診断機能について

本機の動作に不具合が生じたとき，自己診断機能が働き，ビューファインダまたはLCD画面に，どう処置したらよいか判断できる表示を行ないます。自己診断機能については取扱説明書にも掲載されています。

2. 自己診断表示

本機の動作に不具合が生じたとき，ビューファインダまたはLCD画面のカウンタ表示部分がアルファベットと数字の4桁表示になり，3.2Hzで点滅します。この5文字の表示によって，対応者分類および不具合の生じたブロックの分類，不具合の詳細コードを示します。



注意：「自己診断表示」データはリチウム電池（FP-953フレキシブル（BT1001））を外しても消えません。

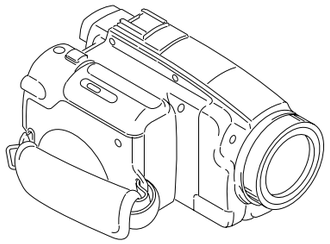
3. 自己診断コード表

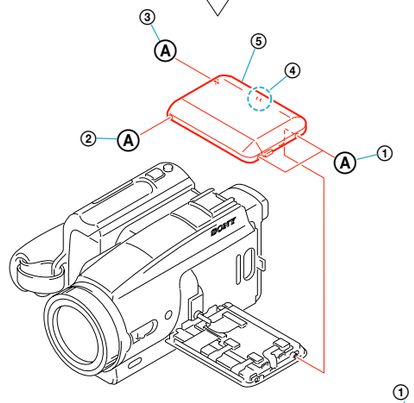
自己診断コード			症状／状態	対応／方法
対応者	ブロック機能	詳細コード		
C	0 4	0 0	インフォリチウム以外のバッテリを使用している	インフォリチウムバッテリを使用する
C	2 1	0 0	結露している	カセットを取り出して，約1時間してからもう一度入れ直す
C	2 2	0 0	ビデオヘッドが汚れている	別売のクリーニングカセットできれいにする
C	3 1	1 0	LOAD方向，ローディング所定時間内終了せず	テープを入れ直し，再度操作し直す
C	3 1	1 1	UNLOAD方向，ローディング所定時間内終了せず	テープを入れ直し，再度操作し直す
C	3 1	2 0	UNLOAD時，Tリール側テープ弛み	テープを入れ直し，再度操作し直す
C	3 1	2 1	テープ残量計算時，Sリール巻取り異常	テープを入れ直し，再度操作し直す
C	3 1	2 2	Tリール異常	テープを入れ直し，再度操作し直す
C	3 1	2 3	Sリール異常	テープを入れ直し，再度操作し直す
C	3 1	2 4	Tリール異常	テープを入れ直し，再度操作し直す
C	3 1	3 0	キャプスタン起動時FG異常	テープを入れ直し，再度操作し直す
C	3 1	4 0	ドラム起動時FG異常	テープを入れ直し，再度操作し直す
C	3 1	4 2	ドラム定常時FG異常	テープを入れ直し，再度操作し直す
C	3 2	1 0	LOAD方向，ローディング所定時間内終了せず	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	1 1	UNLOAD方向，ローディング所定時間内終了せず	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	2 0	UNLOAD時，Tリール側テープ弛み	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	2 1	テープ残量計算時，Sリール巻取り異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	2 2	Tリール異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	2 3	Sリール異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	2 4	Tリール異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	3 0	キャプスタン起動時FG異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	4 0	ドラム起動時FG異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
C	3 2	4 2	ドラム定常時FG異常	バッテリまたは電源ケーブルを外して付け直し，再度操作し直す
E	2 0	0 0	Aページ，Dページのデータが書き換えられている	Aページ，Dページを元の値に戻す
E	6 1	0 0	フォーカスが合いにくい （フォーカスの初期化ができない）	フォーカス手動モードでフォーカスリングを回した時，フォーカス動作をすればレンズブロックのフォーカスMRセンサ（VC-366基板CN1010 ㉕㉖ピンを点検。フォーカス動作をしなければフォーカスモータドライブ回路（VC-366基板IC5102）を点検。
E	6 1	1 0	ズーム動作の異常（ズームレンズの初期化ができない）	ズームレンズバーを操作した時，ズーム動作をすればレンズブロックのズームMRセンサ（VC-366基板CN1010 ㉓㉔ピン）を点検。ズーム動作をしなければズームモータドライブ回路（VC-366基板IC5102）を点検。
E	6 2	0 0	手振れ補正が効きにくい （PITCH角速度センサ出力張り付き）	PITCH角速度センサ（SE-149基板SE520）周辺回路点検
E	6 2	0 1	手振れ補正が効きにくい （YAW角速度センサ出力張り付き）	YAW角速度センサ（SE-149基板SE520）周辺回路点検
E	9 1	0 1	フラッシュ電源コンデンサ充電時に異常	フラッシュユニットの点検または交換

SECTION 2
DISASSEMBLY

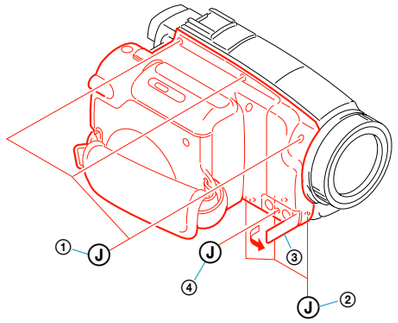
The following flow chart shows the disassembly procedure.

2-1. DISASSEMBLY



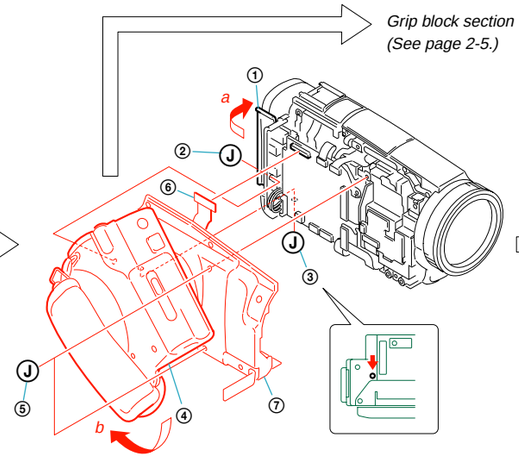


① *Two screws (M1.7x2.5) black*
② *Screw (M1.7x2.5) black*
③ *Screw (M1.7x2.5) black*
④ *Claw*
⑤ *LCD cabinet (C)*

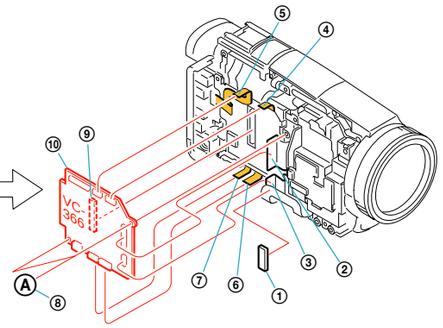


① *Three screws (M1.7x4) black*
② *Three screws (M1.7x4) black*
③ *Open the jack cover (Front) in the direction of the arrow.*
④ *Screw (M1.7x4) black*

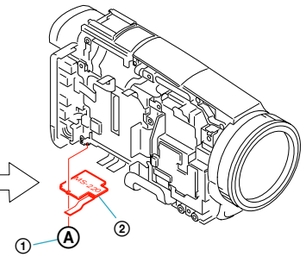
Grip block section (See page 2-5.)



① *Open the jack cover in the direction of the arrow a.*
② *Screw (M1.7x4) black*
③ *Screw (M1.7x4) black*
④ *Turn over the grip block section in the direction of the arrow b.*
⑤ *Two screws (M1.7x4) black*
⑥ *FP-939 flexible board (80P)*
⑦ *Grip block section, Cabinet (L)*

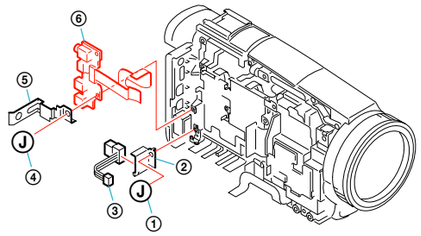


① *Tape (C) flexible*
② *CD-516 board (80P)*
③ *LD-163 board (40P)*
④ *FP-945 flexible board (15P)*
⑤ *FP-942 flexible board (10P)*
⑥ *FP-940 flexible board (23P)*
⑦ *FP-941 flexible board (10P)*
⑧ *Two screws (M1.7x2.5) black*
⑨ *Board to board (120P)*
⑩ *VC-366 board*

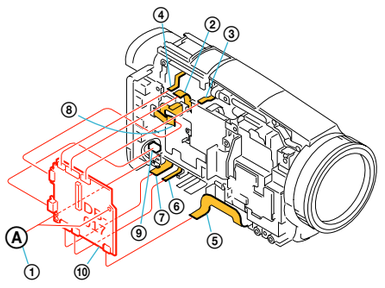


① *Screw (M1.7x2.5) black*
② *MS-220 board, FP-941 flexible board*

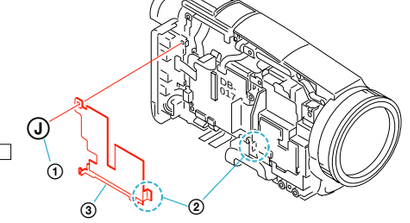
① *Two screws (M1.7x2.5) black*
② *Tapping screw (B1.7x3.5) silver*
③ *Cushion, absorbing*
④ *Center frame*



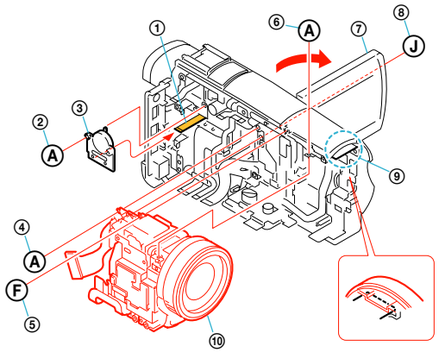
① *Screw (M1.7x4) black*
② *DC-IN stay*
③ *DC-IN connector*
④ *Screw (M1.7x4) black*
⑤ *Jack (Rear) frame*
⑥ *JK-271 board, FP-942 flexible board*



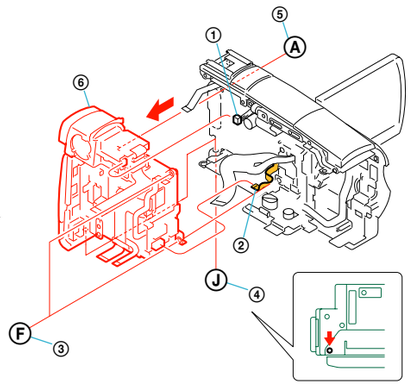
① *Two screws (M1.7x2.5) black*
② *FP-943 flexible board (29P)*
③ *FP-946 flexible board (19P)*
④ *FP-944 flexible board (10P)*
⑤ *FP-942 flexible board (12P)*
⑥ *FP-954 flexible board (17P)*
⑦ *FP-953 flexible board (8P)*
⑧ *FP-957 flexible board (14P)*
⑨ *DC-IN connector (3P)*
⑩ *DB-017 board*



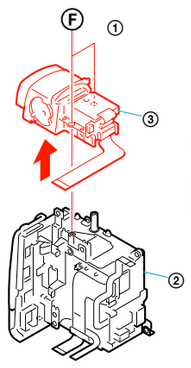
① *Screw (M1.7x4) black*
② *Claw*
③ *Shield plate assembly*



① *FP-943 flexible board*
② *Screw (M1.7x2.5) black*
③ *Capacitor cap*
④ *Screw (M1.7x2.5) black*
⑤ *Tapping screw (B1.7x5) black*
⑥ *Screw (M1.7x2.5) black*
⑦ *Open the LCD section in the direction of the arrow.*
⑧ *Screw (M1.7x4) black*
⑨ *Claw*
⑩ *Lens section*



① *From microphone unit (4P)*
② *FP-958 flexible board (10P)*
③ *Two tapping screws (B1.7x5) black*
④ *Screw (M1.7x4) black*
⑤ *Screw (M1.7x2.5) black*
⑥ *Battery holder section, EVF section*



① *Two tapping screws (B1.7x5) silver*
② *Battery holder section*
③ *EVF section*

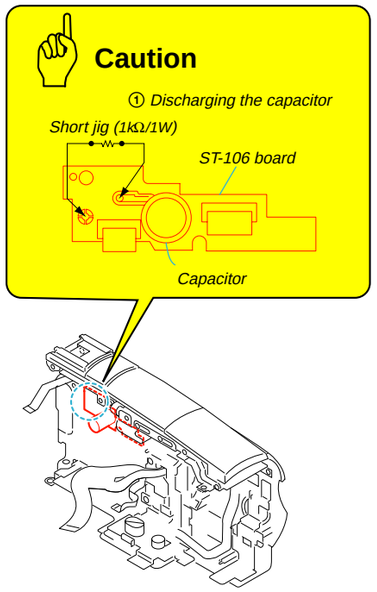
Top cabinet section, LCD section (See page 2-3.)

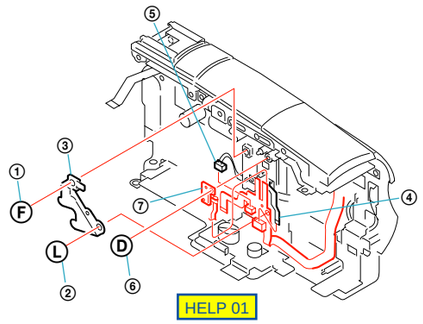
□ *Silver*

■ *Black*

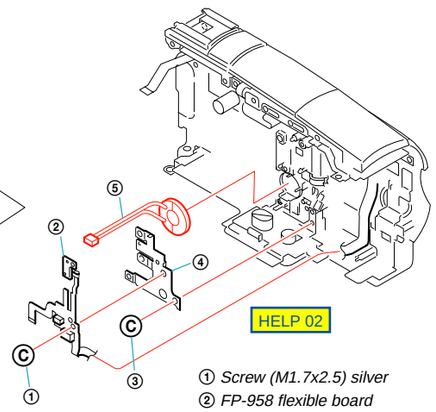
Ⓐ *Screw M1.7x2.5 3-080-198-11*	Ⓑ *Tapping screw M1.7x3.5 3-080-204-01*	Ⓒ *Screw M1.7x2.5 3-078-889-11*
Ⓓ *Tapping screw B1.7x3.5 3-078-890-01*	Ⓔ *Screw M1.7x2.5 3-973-497-91*	Ⓕ *Tapping screw B1.7x5 3-080-204-21*
Ⓖ *Screw M1.7x2.5 3-973-497-91*	Ⓗ *Screw M2x3.5 3-082-266-01*	Ⓙ *Screw M1.7x4 3-080-198-31*
Ⓚ *Screw M1.7x2.5 4-223-676-10*	Ⓛ *Screw M1.7x2.5 3-084-523-11*	Ⓜ *Screw M1.7x2.5 2-187-345-01*

2. DISASSEMBLY

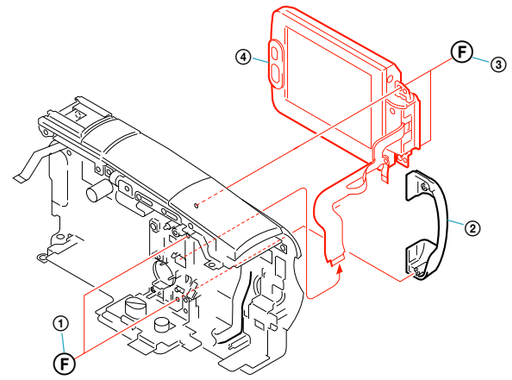




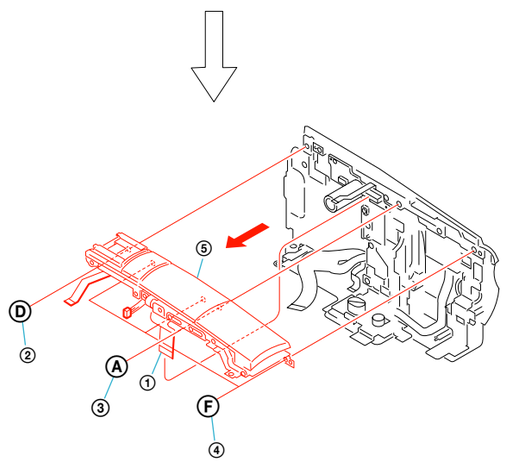
① Tapping screw (B1.7x5) black
② Screw (M1.7x2.5) black
③ Panel (FPC) retainer
④ FP-955 flexible board (6P)
⑤ From speaker (2P)
⑥ Tapping screw (B1.7x3.5) silver
⑦ FP-958 flexible board



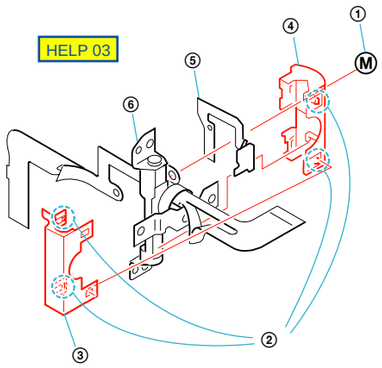
① Screw (M1.7x2.5) silver
② FP-958 flexible board
③ Screw (M1.7x2.5) silver
④ Speaker retainer
⑤ Speaker



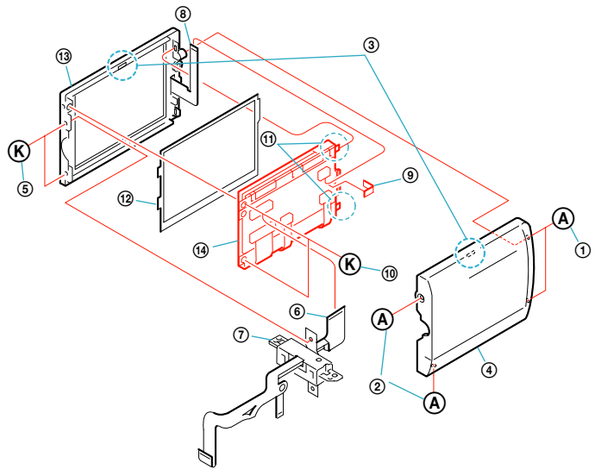
① Two tapping screws (B1.7x5) black
② Hinge cabinet
③ Two tapping screws (B1.7x5) black
④ LCD section



① From flash unit (22P)
② Tapping screws (B1.7x3.5) silver
③ Screw (M1.7x2.5) black
④ Three tapping screws (B1.7x5) black
⑤ Top cabinet section



① Screw (M1.7x2.5) black
② Four claws
③ Hinge cover (C)
④ Hinge cover (M)
⑤ FP-955 flexible board
⑥ FP-940 flexible board, Hinge section



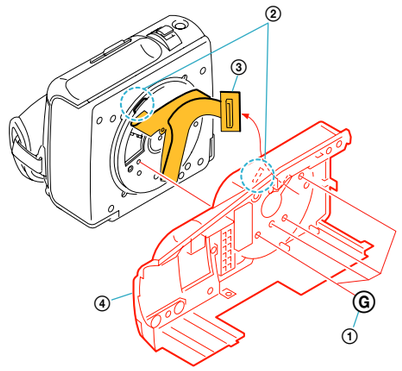
① Two screws (M1.7x2.5) black
② Two screws (M1.7x2.5) black
③ Caw
④ LCD cabinet (C) assembly
⑤ Two screws (M1.7x2.5) silver
⑥ FP-940 flexible board (22P)
⑦ Hinge section
⑧ Control switch block (SS8200) (6P)
⑨ Fixed tape (C)
⑩ Two screws (M1.7x2.5) silver
⑪ Two claws
⑫ Panel protection sheet
⑬ LCD cabinet (M), Control switch block (SS8200)
⑭ PD-221 board, LCD unit (ACX500DMM-J), Light guide plate block

☐ Silver

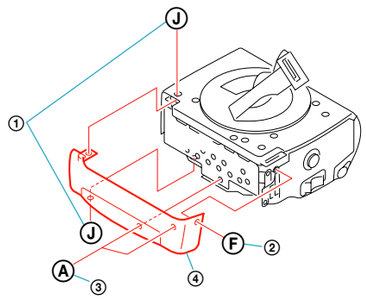
■ Black

Ⓐ Screw M1.7x2.5 3-080-198-11	Ⓑ Tapping screw M1.7x3.5 3-080-204-01	Ⓒ Screw M1.7x2.5 3-078-889-11
Ⓓ Tapping screw B1.7x3.5 3-078-890-01	Ⓔ Screw M1.7x2.5 3-973-497-91	Ⓕ Tapping screw B1.7x5 3-080-204-21
Ⓖ Screw M1.7x2.5 3-973-497-91	Ⓗ Screw M2x3.5 3-082-266-01	Ⓙ Screw M1.7x4 3-080-198-31
Ⓚ Screw M1.7x2.5 4-223-676-10	Ⓛ Screw M1.7x2.5 3-084-523-11	Ⓜ Screw M1.7x2.5 2-187-345-01

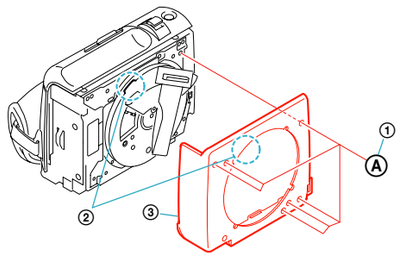
2. DISASSEMBLY



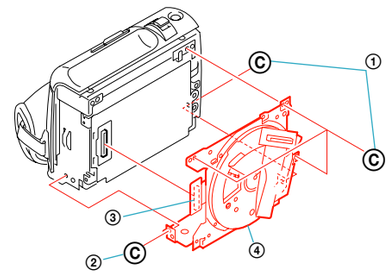
① *Four screws (M1.7×2.5) silver*
② *Claw*
③ *Remove the FP-939 flexible board in the direction of the arrow.*
④ *Cabinet (L) assembly*



① *Two screws (M1.7×4) black*
② *Tapping screw (B1.7×5) black*
③ *Two screws (M1.7×2.5) black*
④ *Grip (Bottom) cabinet*



① *Six screws (M1.7×2.5) black*
② *Claw*
③ *Grip (R) cabinet assembly*

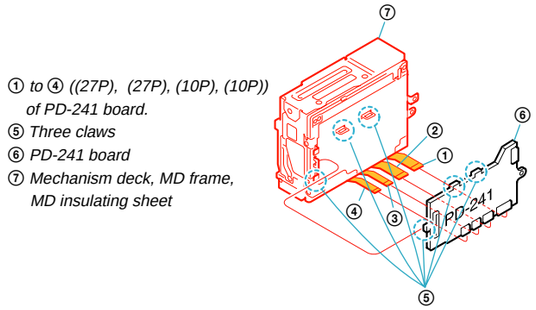


① *Four screws (M1.7×2.5) silver*
② *Screw (M1.7×2.5) silver*
③ *FP-939 flexible board (80P)*
④ *Grip hinge assembly*

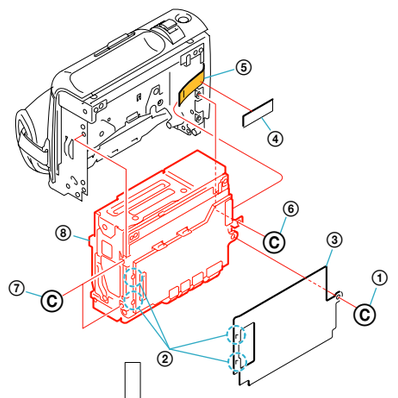
□ *Silver*

■ *Black*

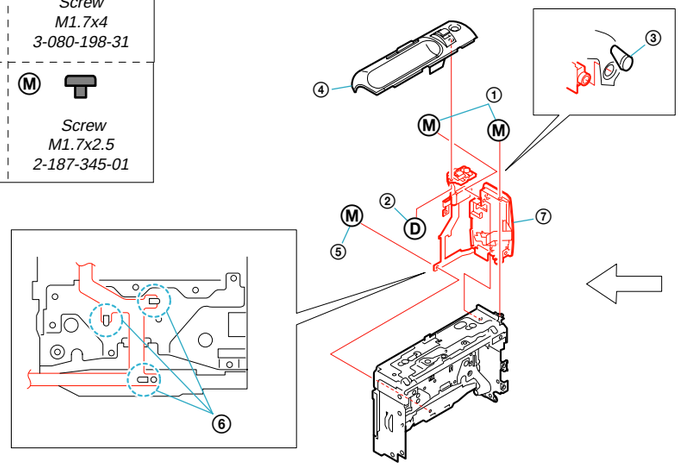
Ⓐ *Screw M1.7x2.5 3-080-198-11*	Ⓑ *Tapping screw M1.7x3.5 3-080-204-01*	Ⓒ *Screw M1.7x2.5 3-078-889-11*
Ⓓ *Tapping screw B1.7x3.5 3-078-890-01*	Ⓔ *Screw M1.7x2.5 3-973-497-91*	Ⓕ *Tapping screw B1.7x5 3-080-204-21*
Ⓖ *Screw M1.7x2.5 3-973-497-91*	Ⓗ *Screw M2x3.5 3-082-266-01*	Ⓙ *Screw M1.7x4 3-080-198-31*
Ⓚ *Screw M1.7x2.5 4-223-676-10*	Ⓛ *Screw M1.7x2.5 3-084-523-11*	Ⓜ *Screw M1.7x2.5 2-187-345-01*



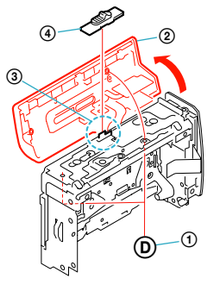
① *to* ④ *((27P), (27P), (10P), (10P)) of PD-241 board.*
⑤ *Three claws*
⑥ *PD-241 board*
⑦ *Mechanism deck, MD frame, MD insulating sheet*



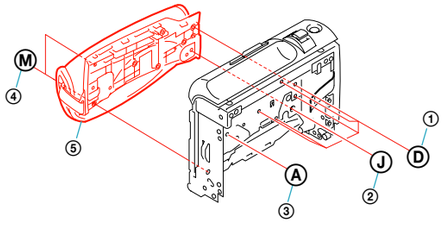
① *Screw (M1.7×2.5) silver*
② *Two claws*
③ *RP shield sheet*
④ *Tape (A)*
⑤ *Control switch block (PS8200) (16P)*
⑥ *Screw (M1.7 × 2.5) silver*
⑦ *Two screws (M1.7×2.5) silver*
⑧ *Mechanism deck, MD frame, RP-241 board, MD insulating sheet*



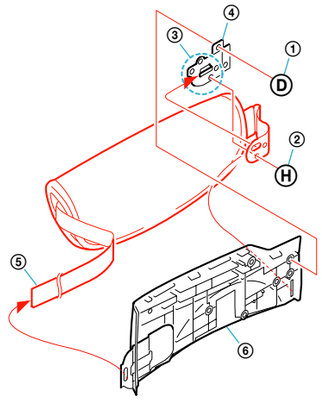
① *Two screws (M1.7×2.5) black*
② *Tapping screw (B1.7×3.5) silver*
③ *Jack cover (HP)*
④ *Grip (Upper) cabinet*
⑤ *Screw (M1.7×2.5) black*
⑥ *Three claws*
⑦ *Control switch block (PS8200)*



① *Two tapping screws (B1.7×3.5) silver*
② *Turn over the Grip (Upper) cabinet, Control switch block (PS8200) in the direction of the arrow.*
③ *Claw*
④ *Eject knob*

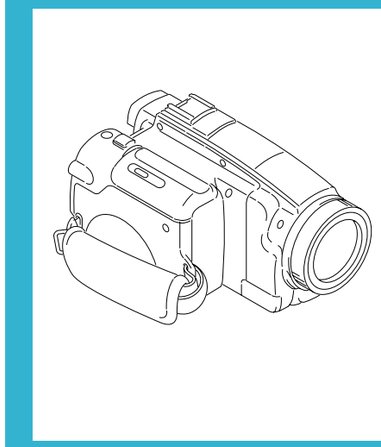


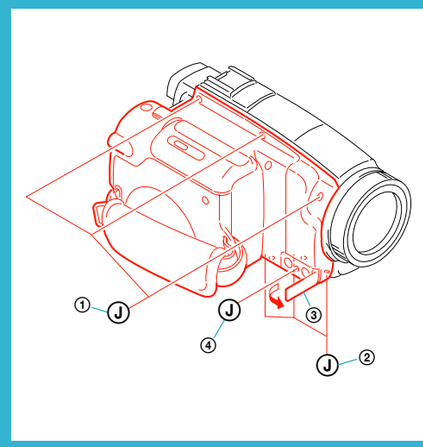
① *Five tapping screws (B1.7×3.5) silver*
② *Screw (M1.7×4) black*
③ *Screw (M1.7×2.5) black*
④ *Two screws (M1.7×2.5) black*
⑤ *Grip belt, Grip (Lid) cabinet, Belt fixed plate (F), Belt fixed plate (R)*

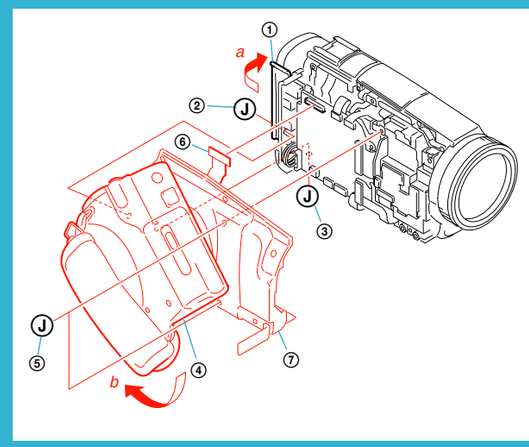


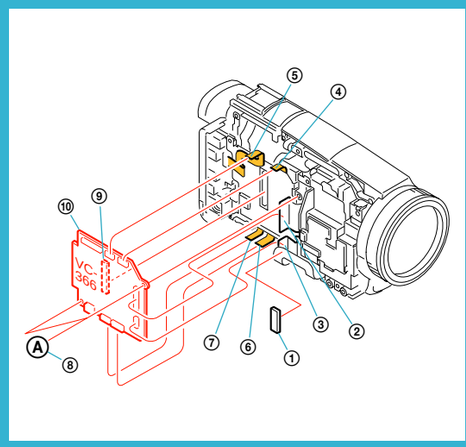
① *Tapping screw (B1.7×3.5) silver*
② *Screw (M2×3.5) silver*
③ *Claw*
④ *Belt fixed plate (F)*
⑤ *Remove the grip belt in the direction of the arrow.*
⑥ *Grip (LID) cabinet*

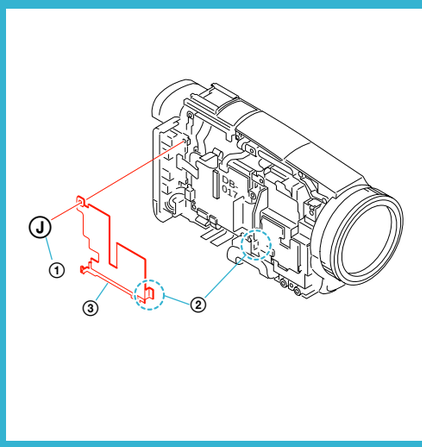
2-2. SERVICE POSITION

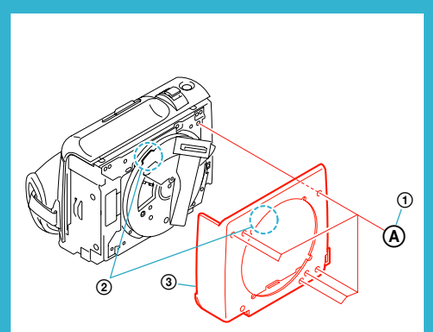


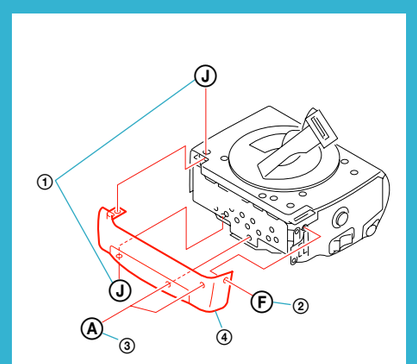


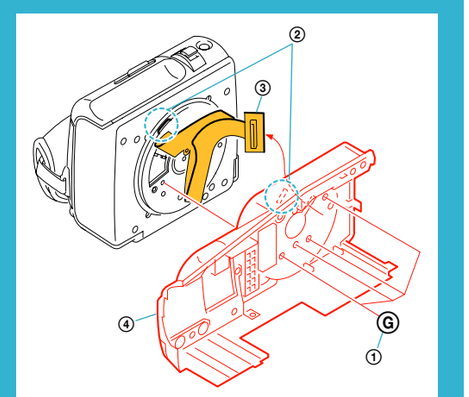


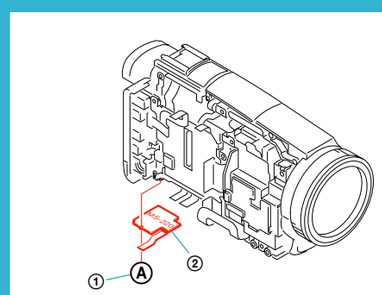


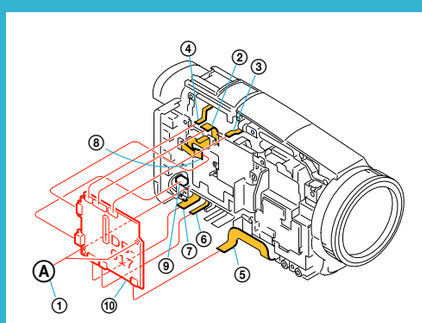


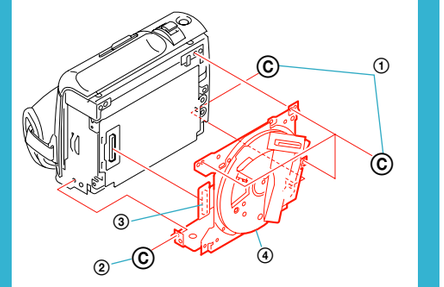


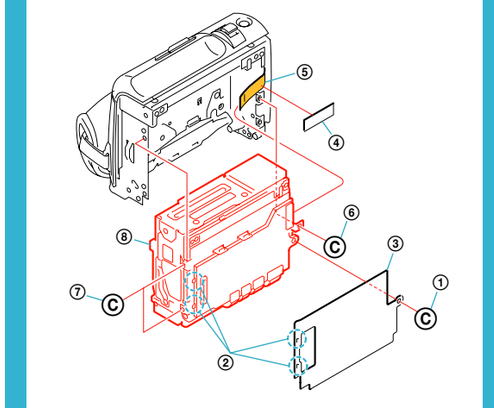


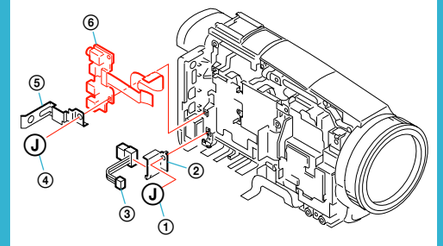












[SERVICE POSITION TO CHECK THE VTR SECTION]
Connection to Check the VTR Section (page 2-9)

2. DISASSEMBLY

[SERVICE POSITION TO CHECK THE VTR SECTION]

Connection to Check the VTR Section

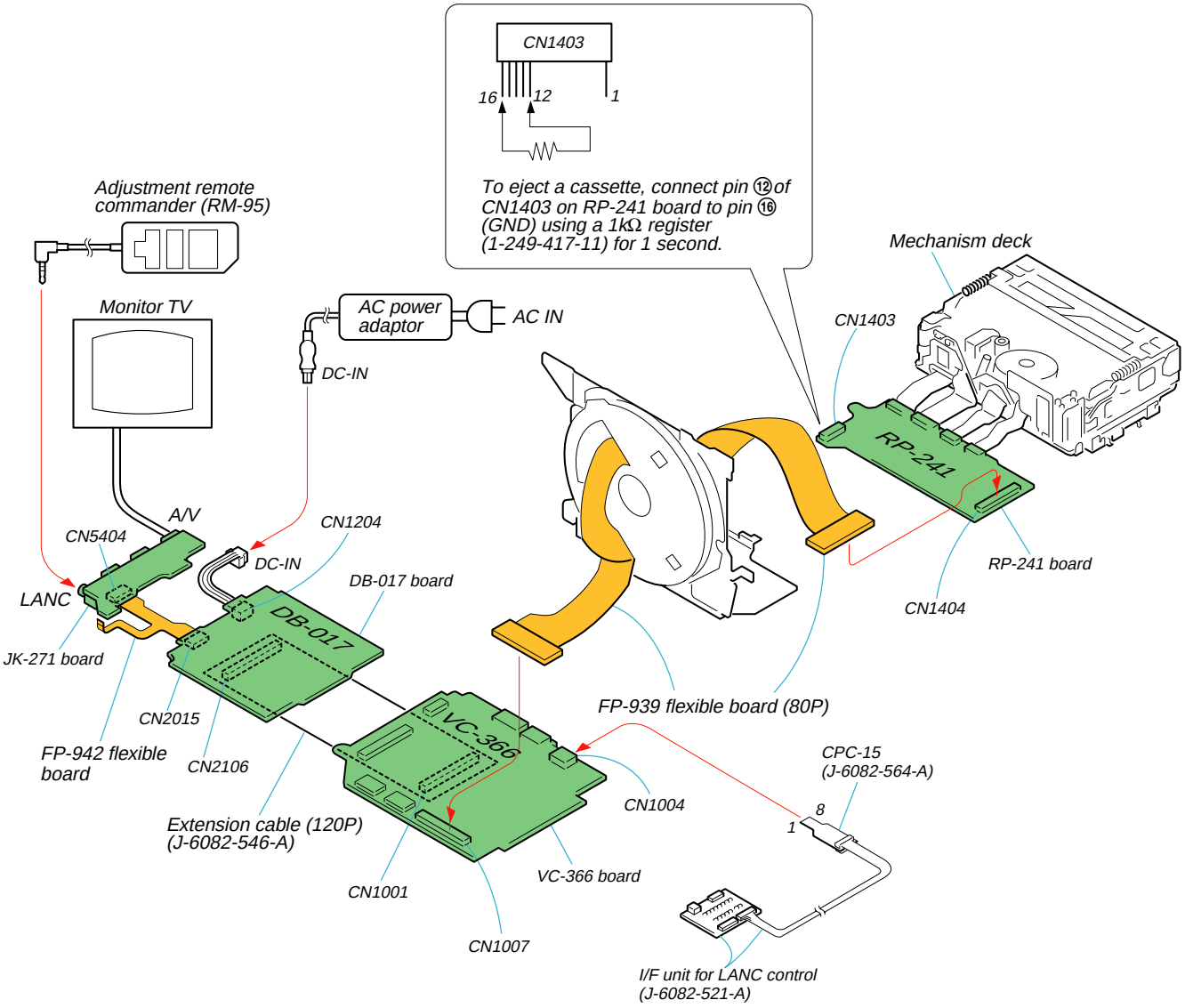
To check the VTR section, set the VTR to the "Forced VTR power ON" mode.
Operate the VTR functions using the adjustment remote commander
(with the HOLD switch set in the OFF position).

Setting the Forced VTR Power ON mode

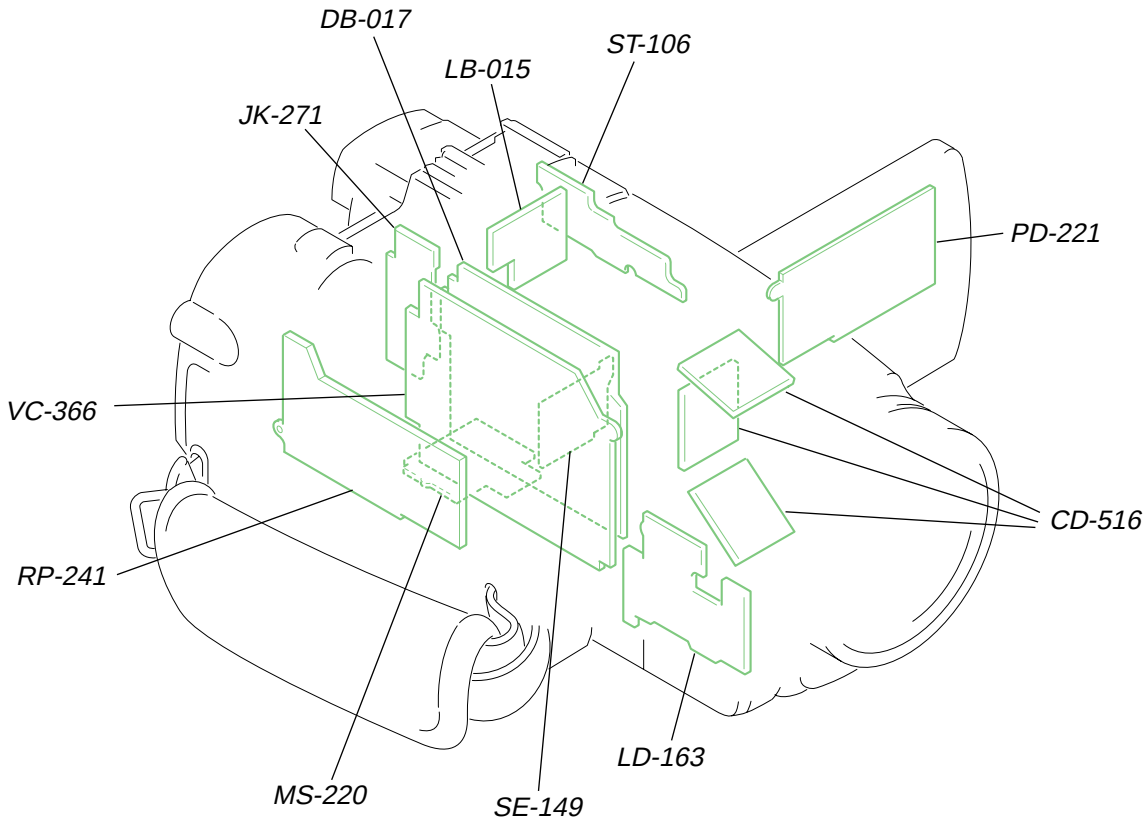
1) Select page: 0, address: 01, and set data: 01.
2) Select page: 0, address: 10, and set data: 00.
3) Select page: A, address: 10, set data: 02, and press the PAUSE button of the adjustment remote commander.

Exiting the Forced VTR Power ON mode

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 0, address: 10, and set data: 00.
3) Select page: A, address: 10, set data: 00, and press the PAUSE button of the adjustment remote commander.
4) Select page: 0, address: 01, and set data: 00.



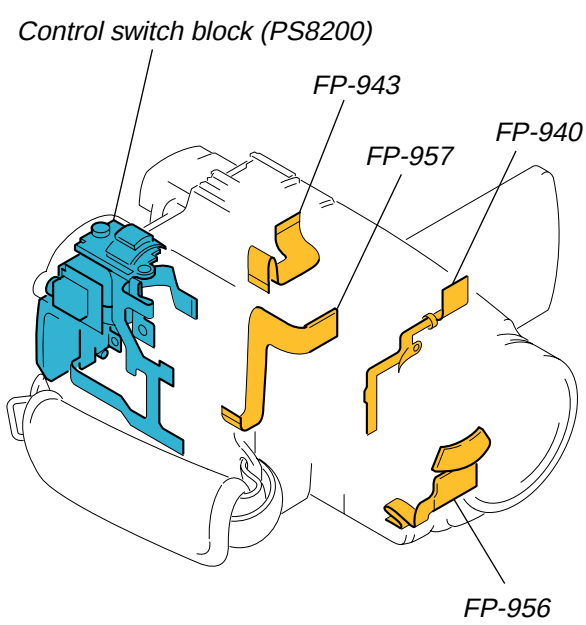
2-3. CIRCUIT BOARDS LOCATION

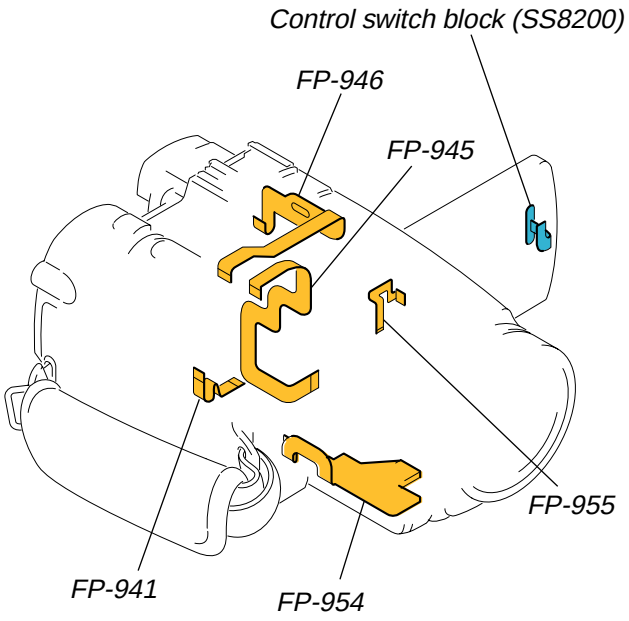


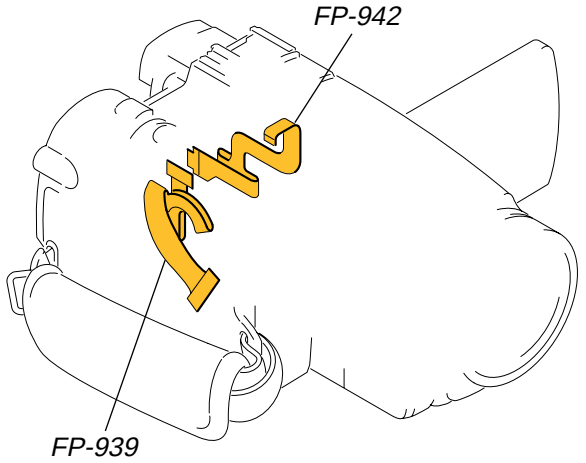
NAME	FUNCTION
CD-516	CCD IMAGER
LD-163	LENS DRIVE
RP-241	REC/PB RF AMP, MECHA CONTROL, CONNECTOR
PD-221	LCD RGB DRIVE, TIMING GENERATOR, BACK LIGHT
JK-271	CONNECTOR
SE-149	PITCH/YAW SENSOR AMP
MS-220	MS CONNECTOR
LB-015	EVF, EVF BL
ST-106	FLASH DRIVE
DB-017	VIDEO I/O, AGC, EVF DRIVE, MIC AMP, VOL CONTROL, AUDIO IN/OUT, AUDIO IN, HI CONTROL, DC/DC CONVERTER, LANC, CONNECTOR
VC-366	RGB-CH AGC, A/D CONVERTER, TIMING GENERATOR, LENS DRIVE, CAMERA RGB PROCESS, CAMERA PROCESS, DV/MPEG MOVIE/DIG STILL/AUDIO PROCESSOR, 64Mbit SDRAM, 128Mbt/16Mbit SDRAM, FLASH MEMORY, DV INTERFACE, DV SIGNAL/RF SIGNAL PROCESSOR, HI/DIGITAL STILL CONTROL, CAMERA CONTROL, VIDEO A/D, CONNECTOR-1, CONNECTOR-2

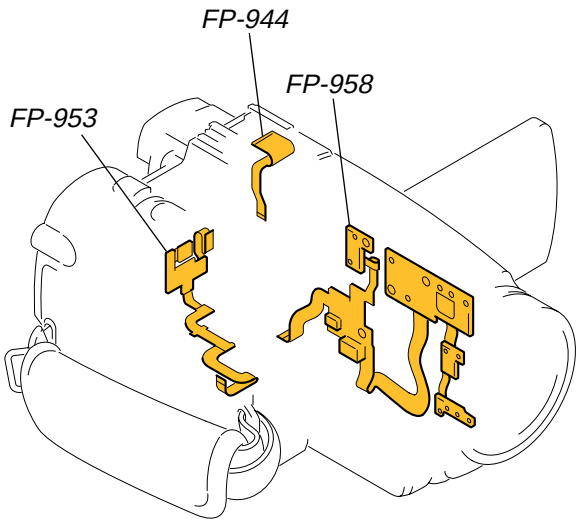
2-4. FLEXIBLE BOARDS LOCATION

The flexible boards contained in the mechanism deck, those in the lens device and those in the flash unit are not shown.



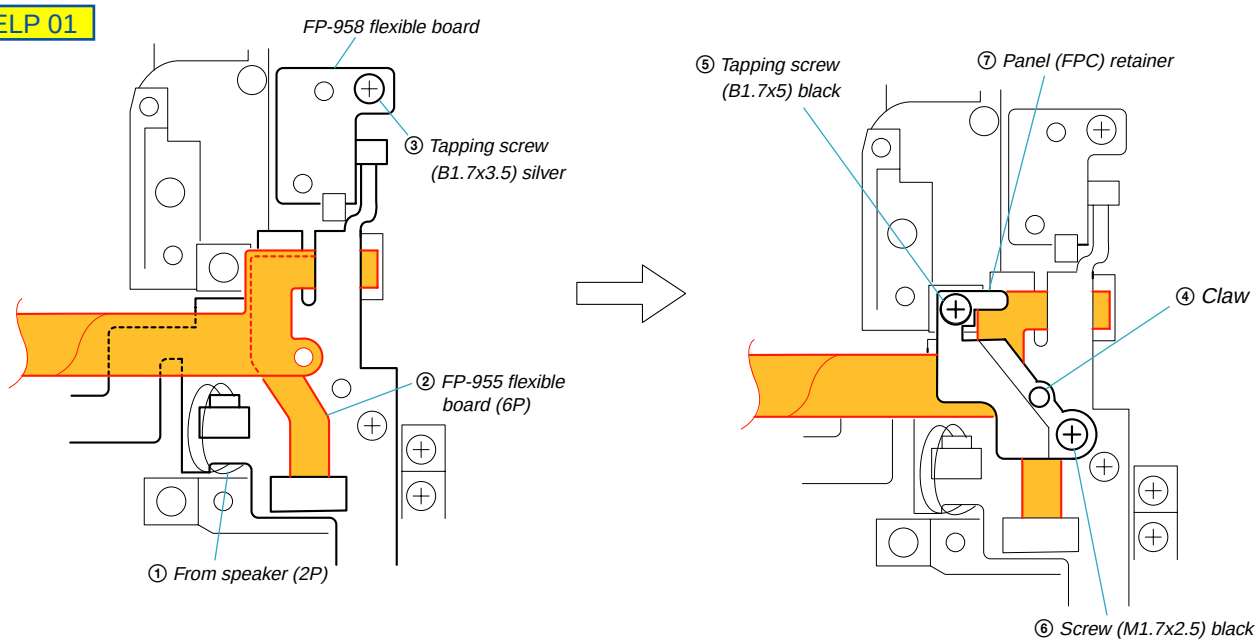




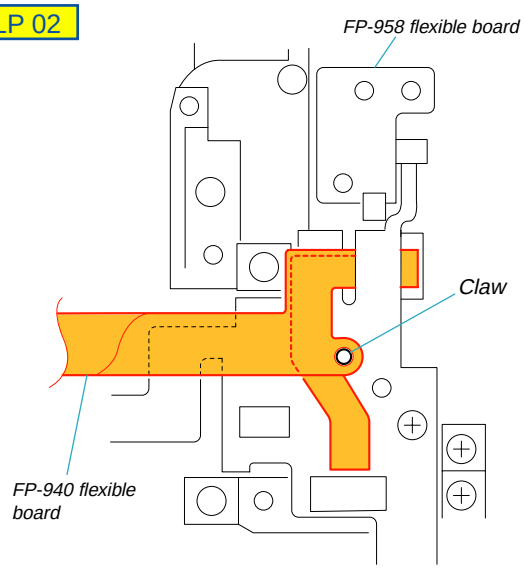


HELP

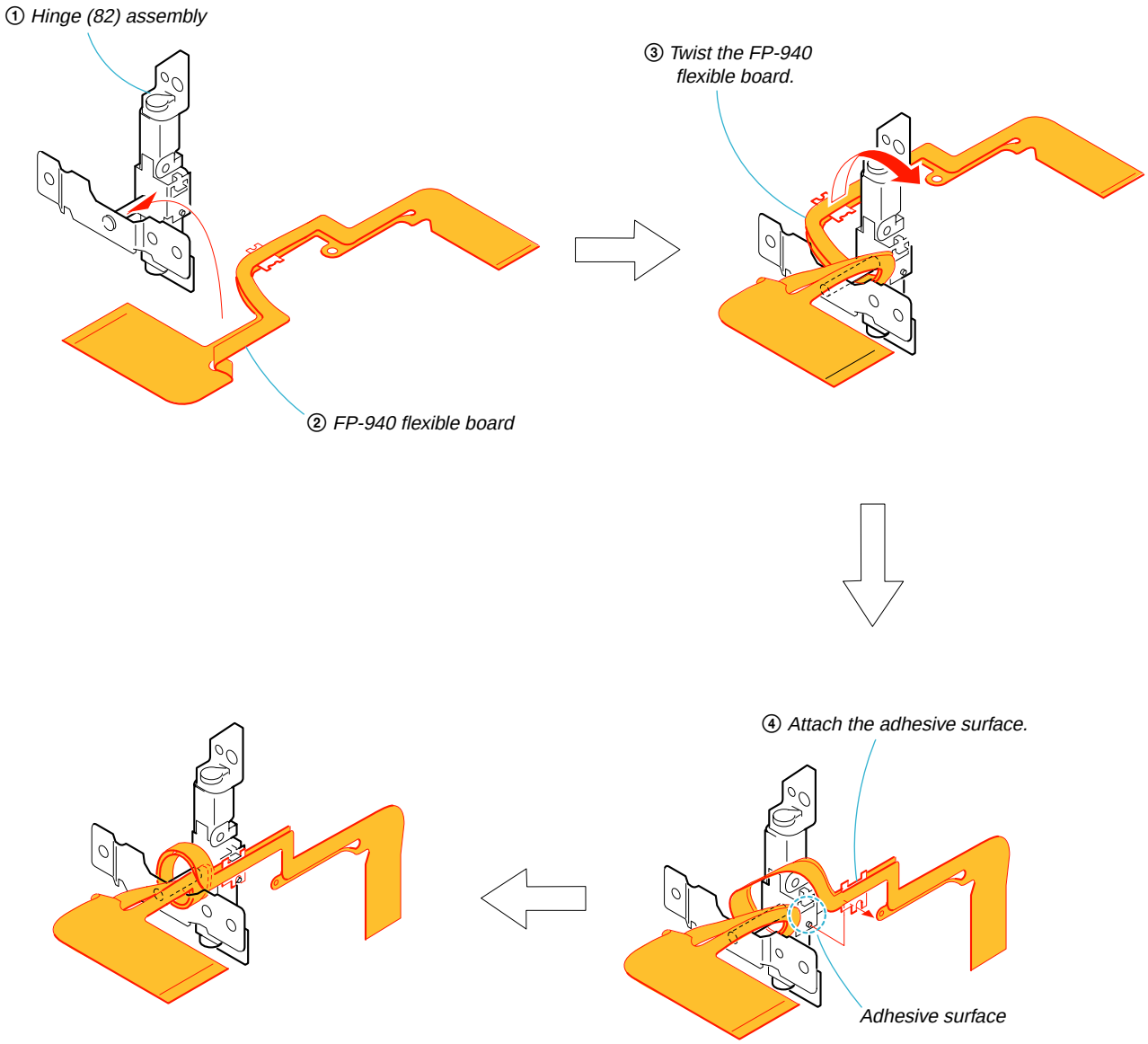
HELP 01



HELP 02



HELP 03


① Hinge (82) assembly
② FP-940 flexible board
③ Twist the FP-940 flexible board.
④ Attach the adhesive surface.
Adhesive surface

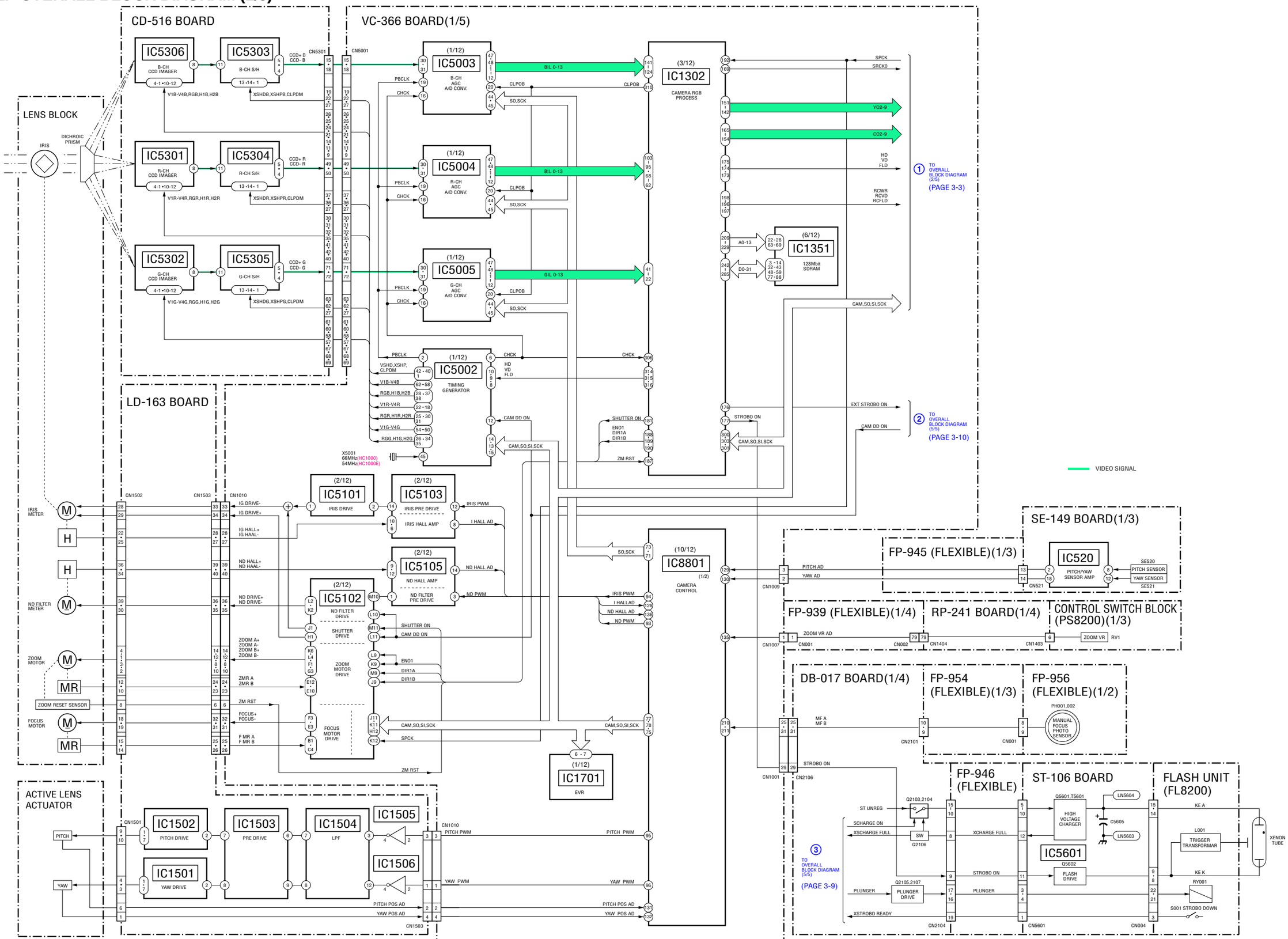
3. BLOCK DIAGRAMS

Link

OVERALL BLOCK DIAGRAM (1/5)	POWER BLOCK DIAGRAM (1/3)
OVERALL BLOCK DIAGRAM (2/5)	POWER BLOCK DIAGRAM (2/3)
OVERALL BLOCK DIAGRAM (3/5)	POWER BLOCK DIAGRAM (3/3)
OVERALL BLOCK DIAGRAM (4/5)	
OVERALL BLOCK DIAGRAM (5/5)	

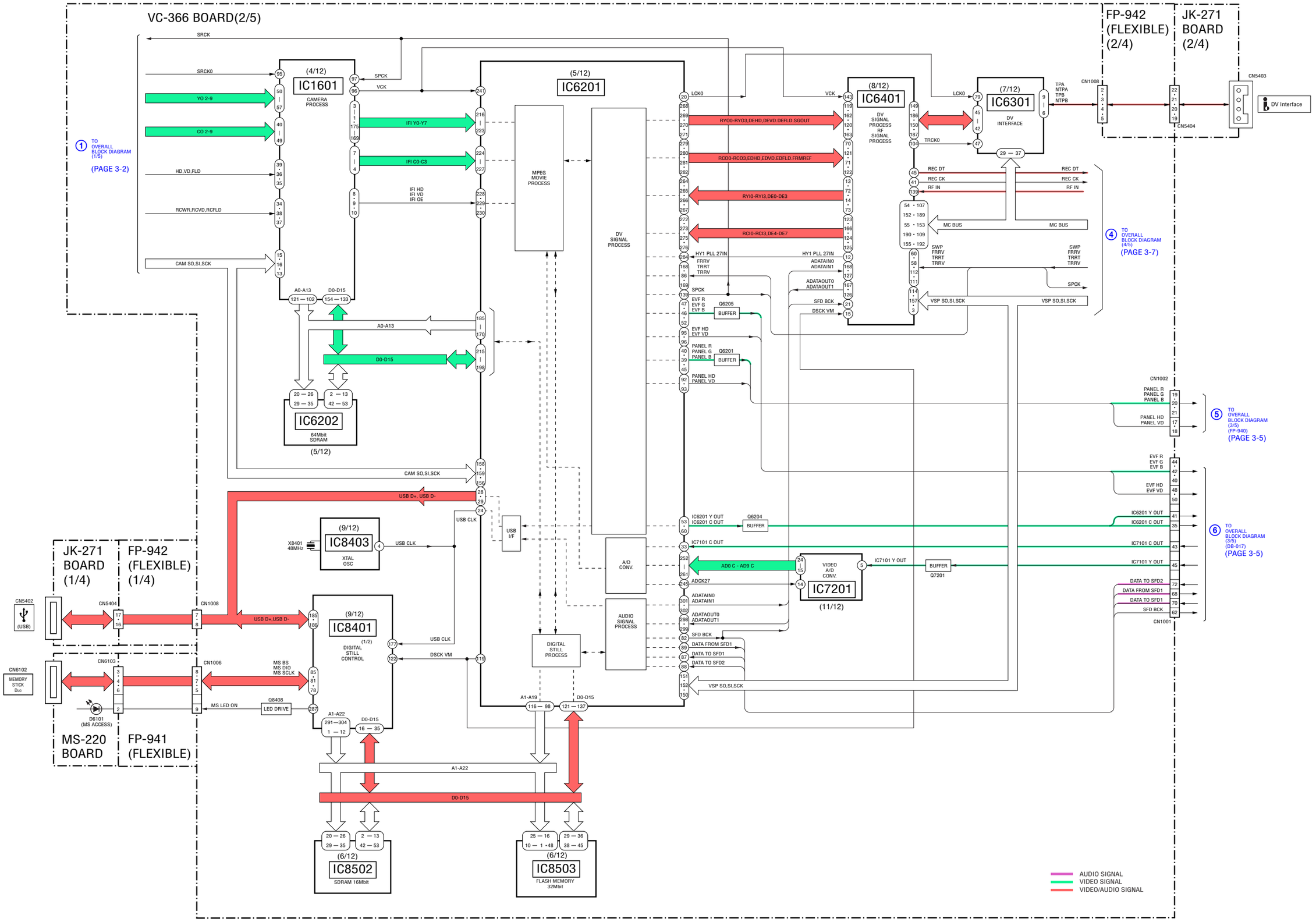
3-1. OVERALL BLOCK DIAGRAM (1/5)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



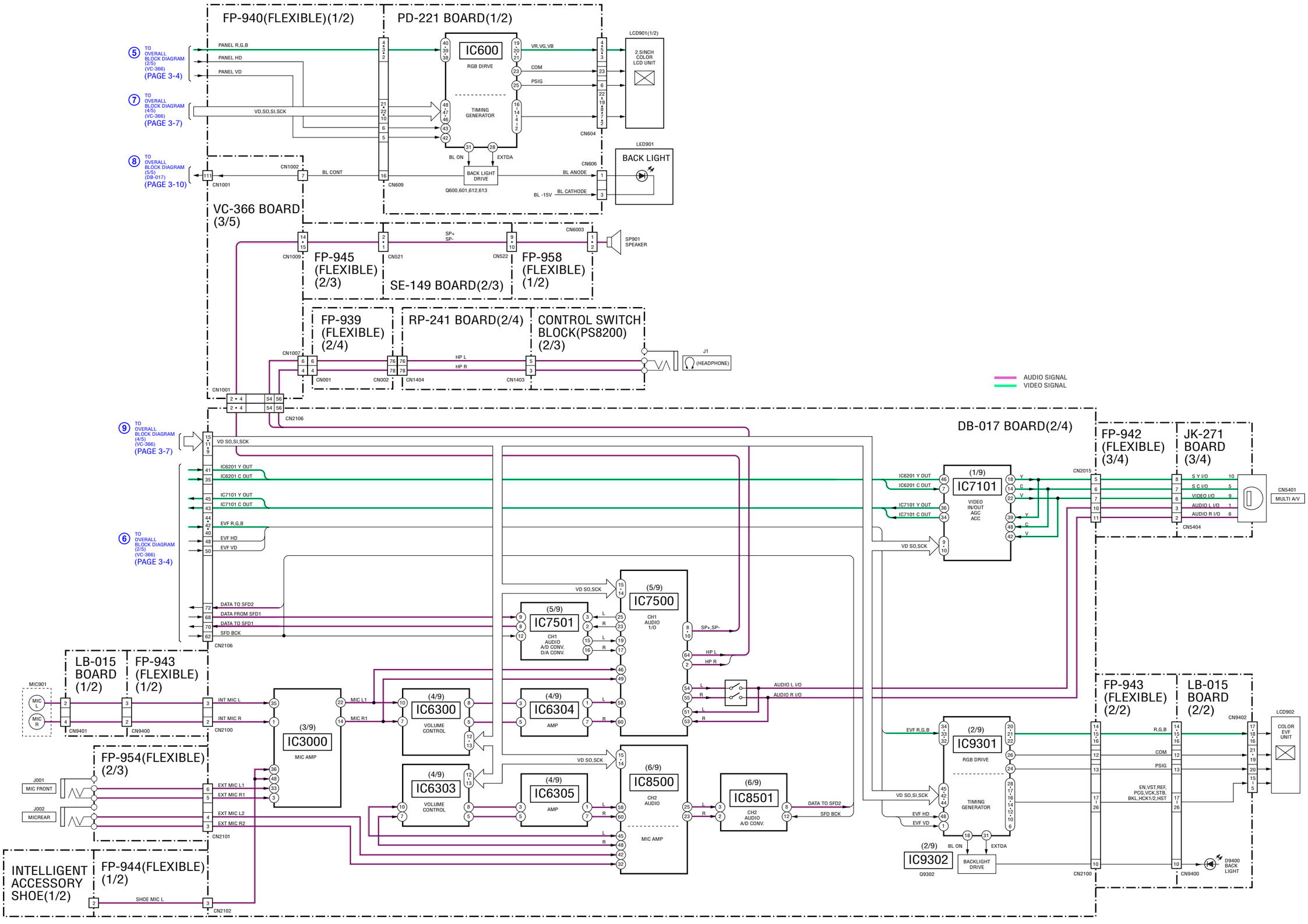
3-2. OVERALL BLOCK DIAGRAM (2/5)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



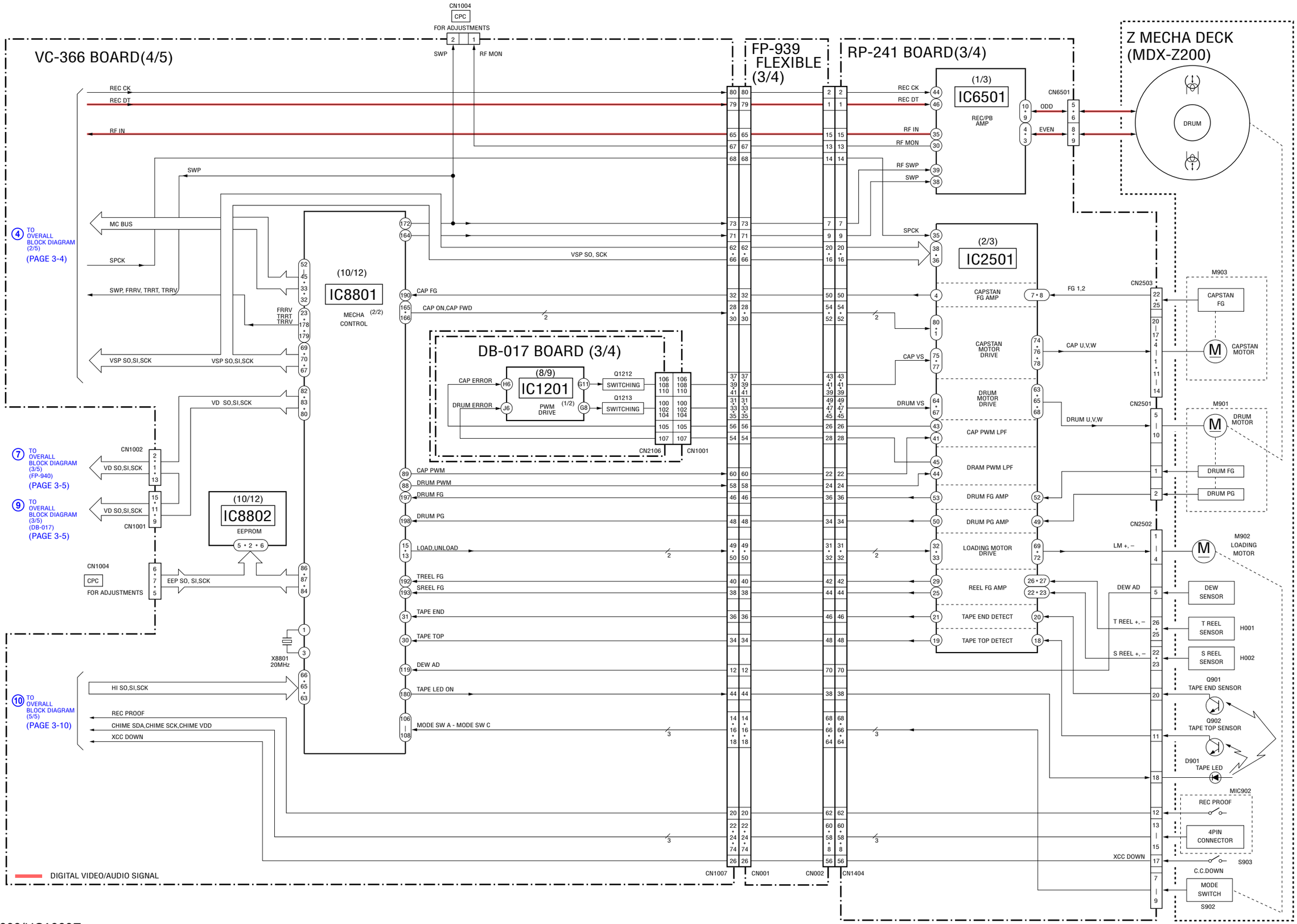
3-3. OVERALL BLOCK DIAGRAM (3/5)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



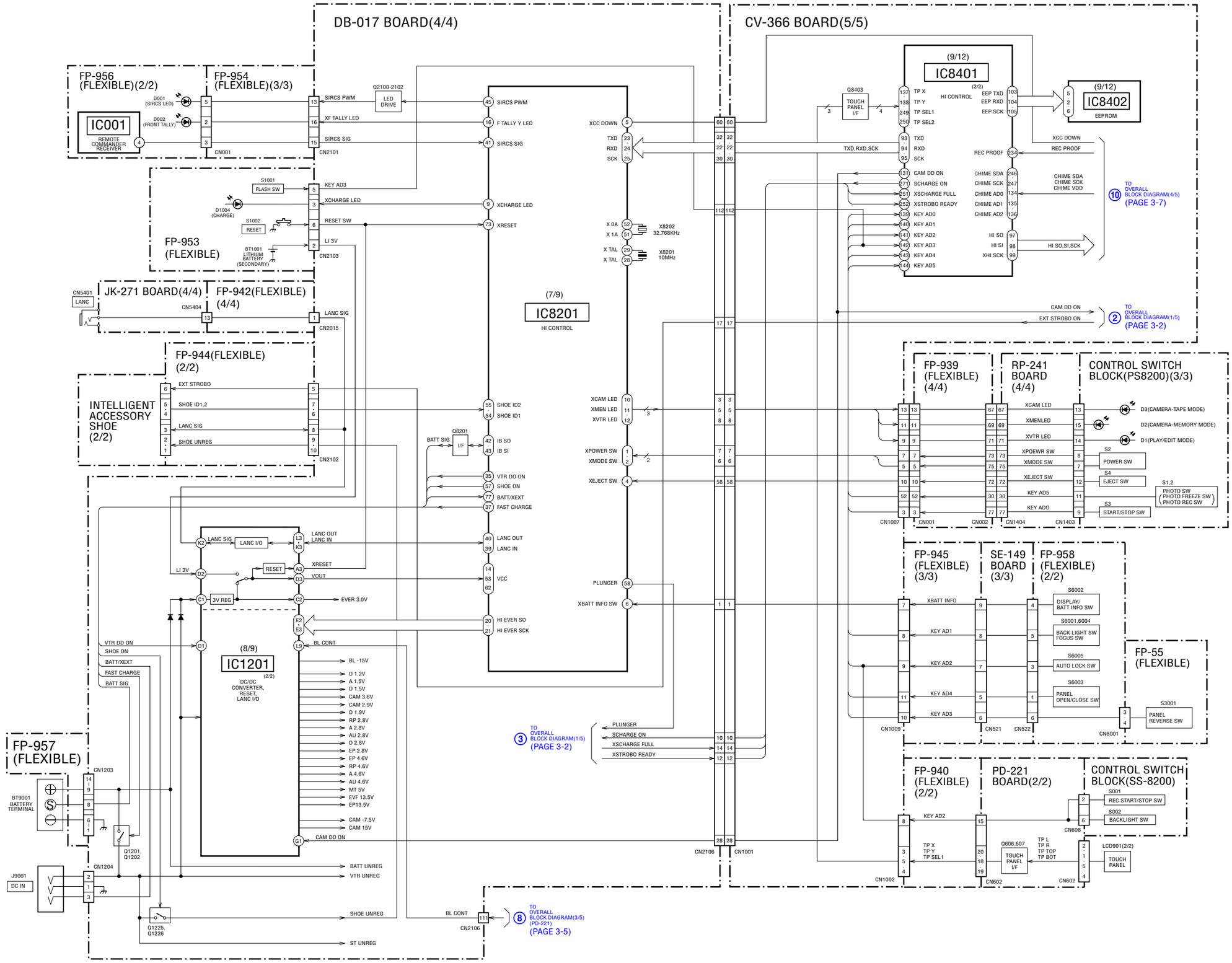
3-4. OVERALL BLOCK DIAGRAM (4/5)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



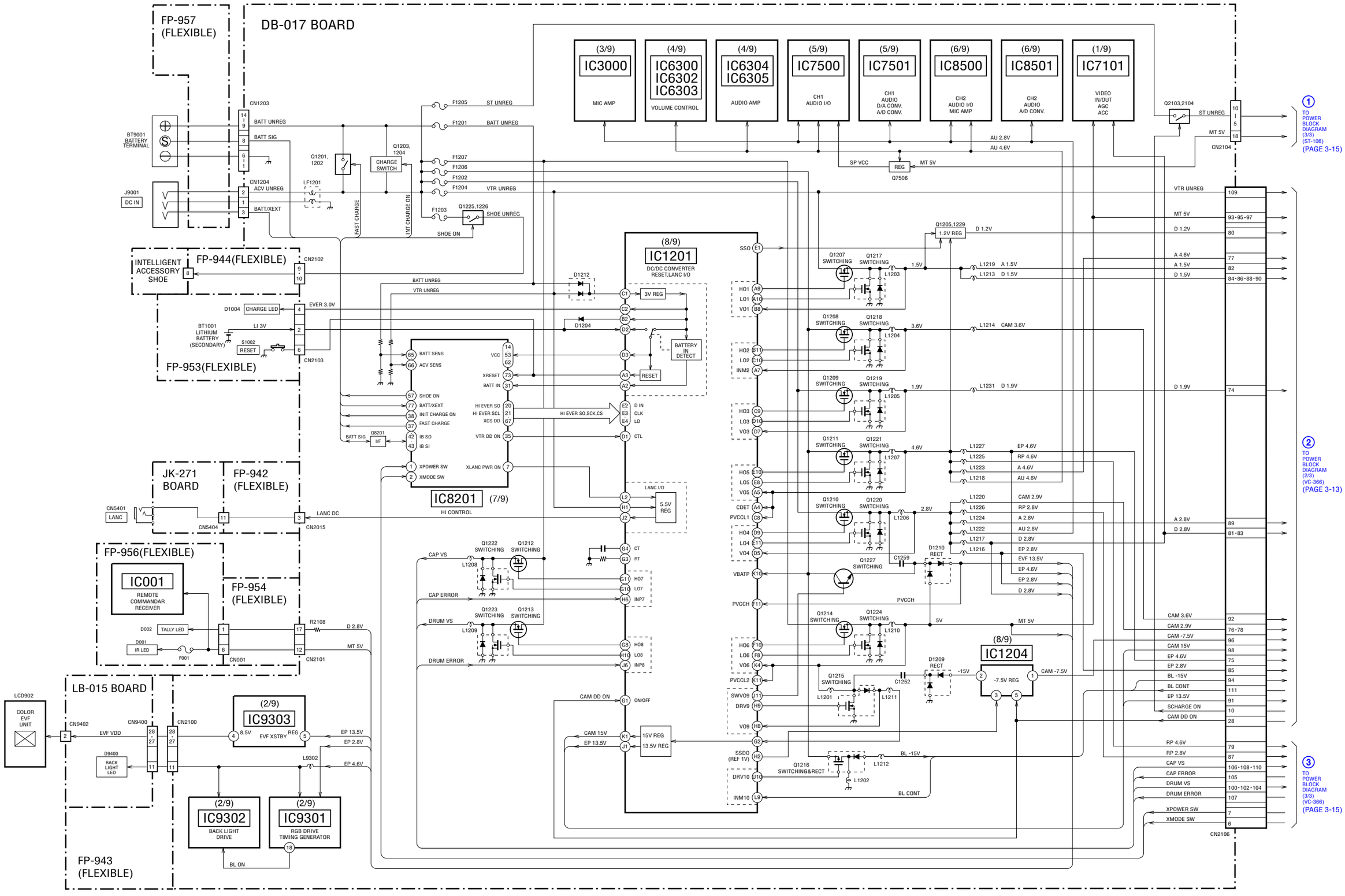
3-5. OVERALL BLOCK DIAGRAM (5/5)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



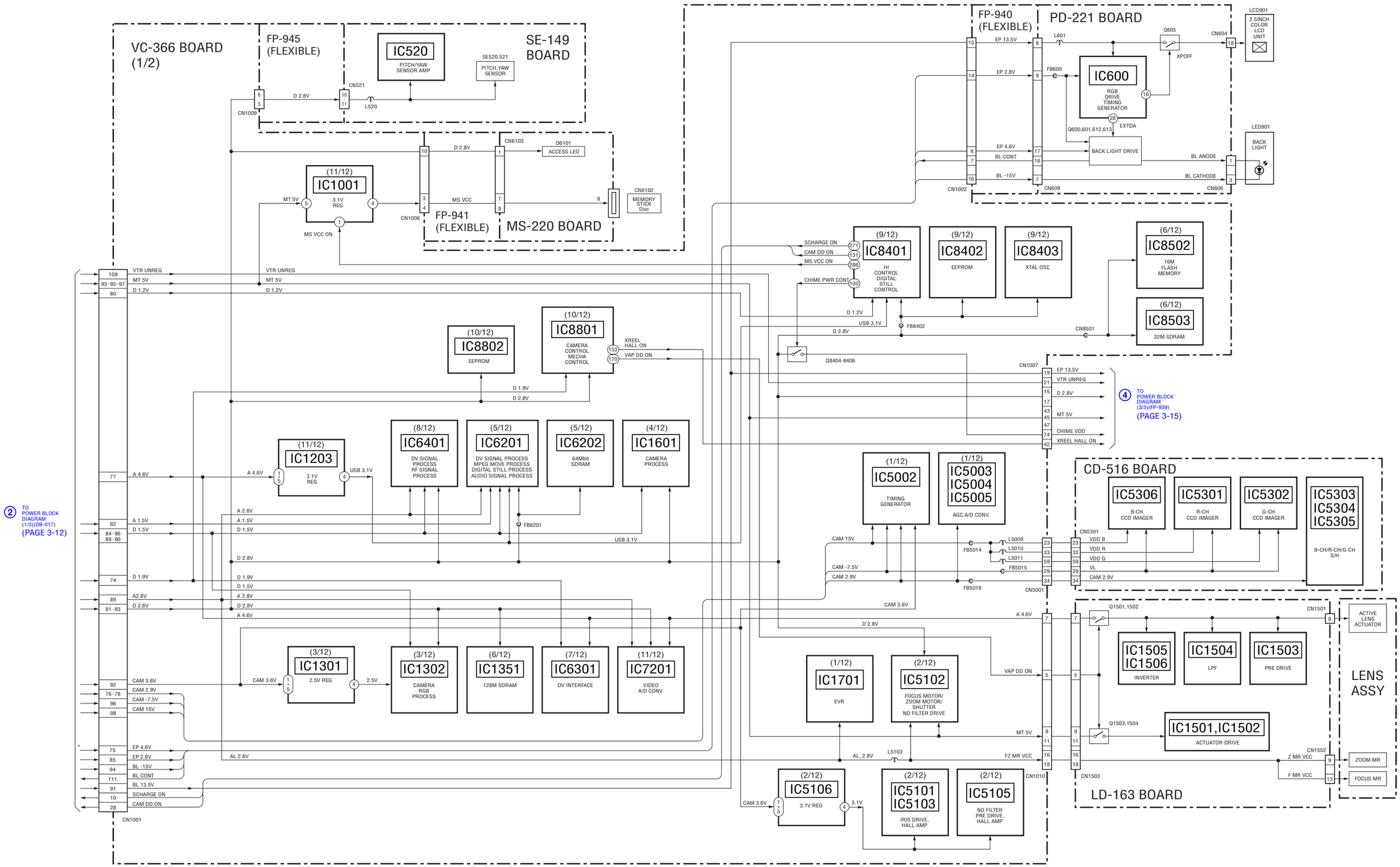
3-6. POWER BLOCK DIAGRAM (1/3)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



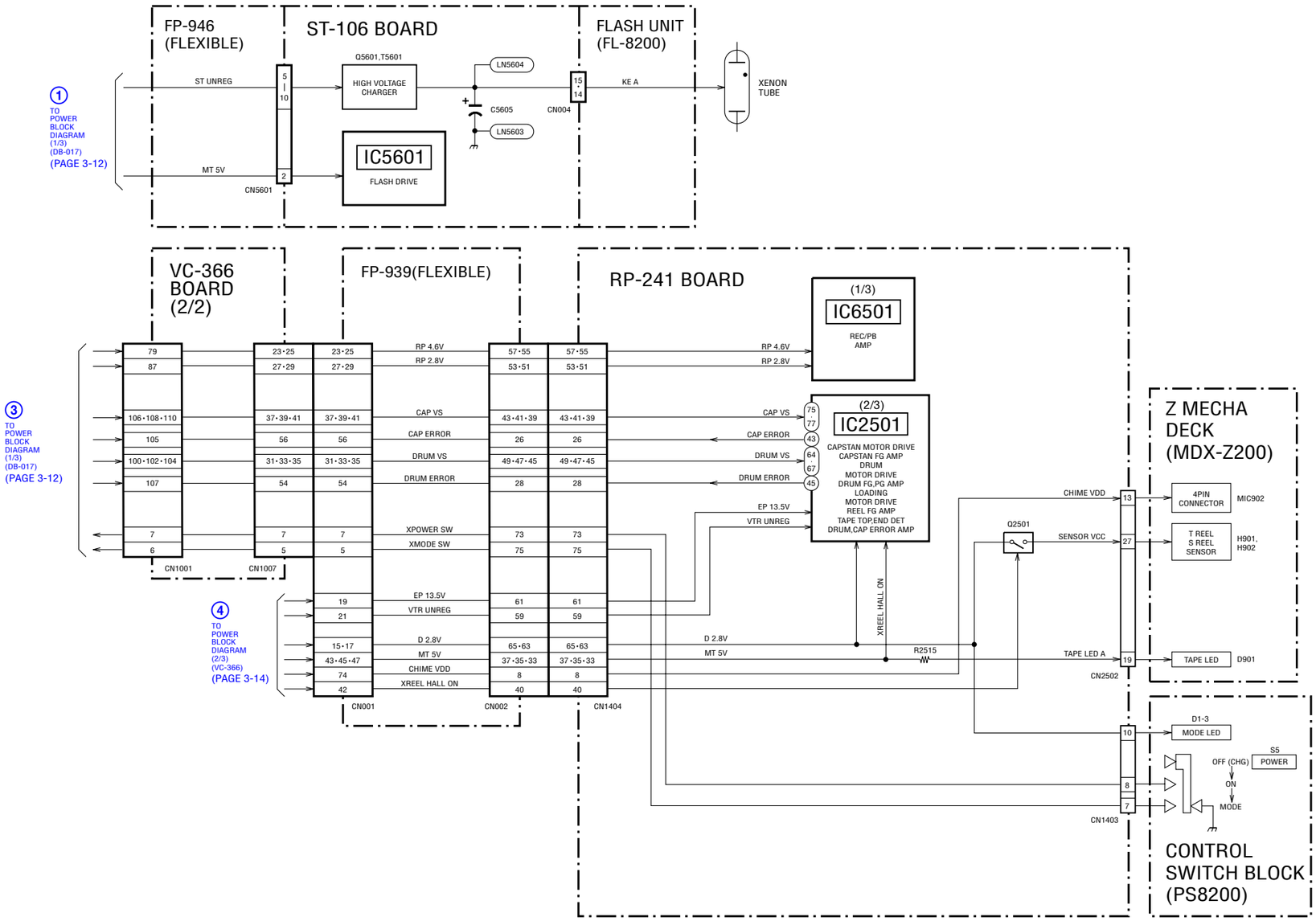
3-7. POWER BLOCK DIAGRAM (2/3)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



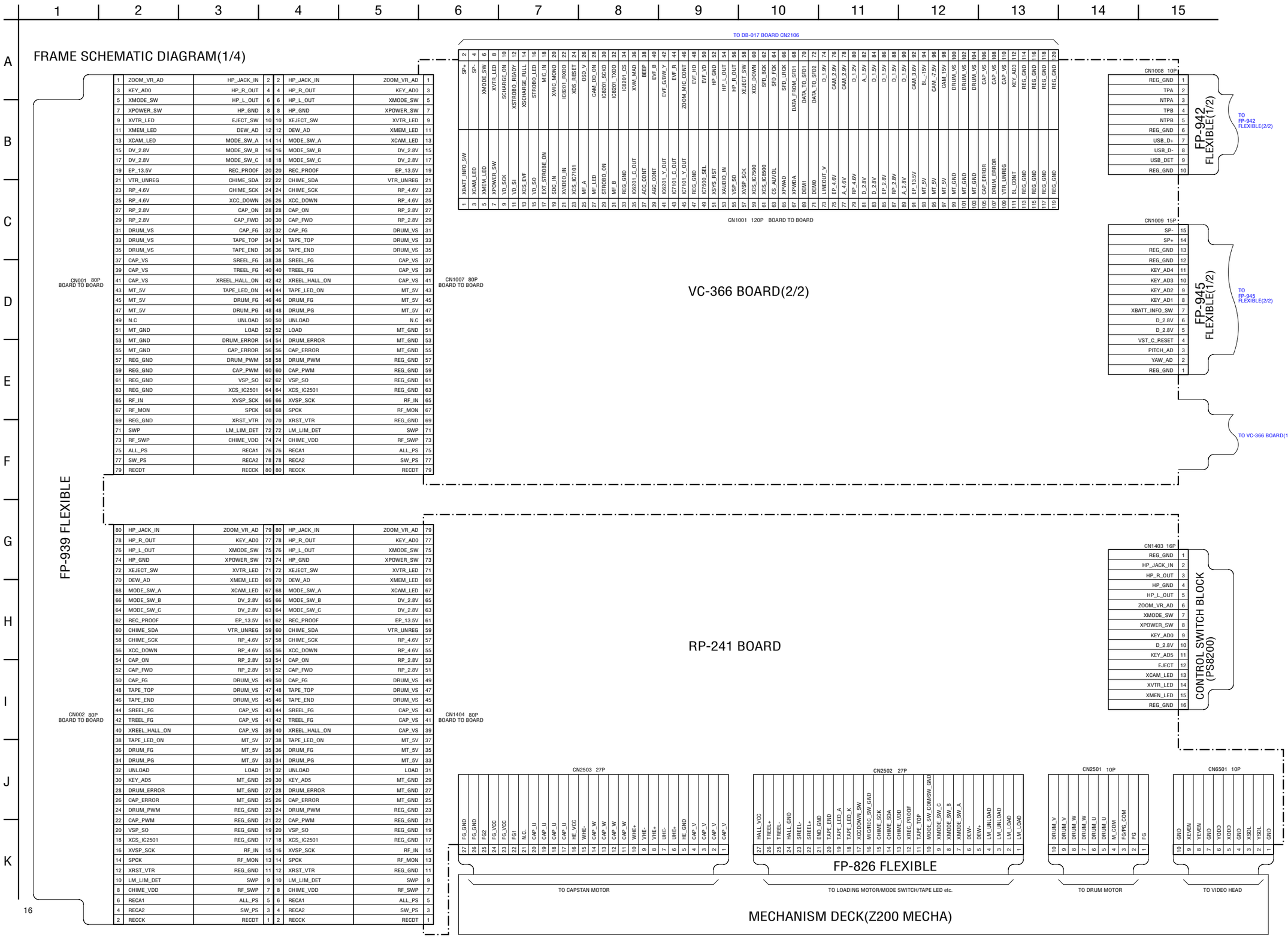
3-8. POWER BLOCK DIAGRAM (3/3)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM (1/4)



1	ZOOM_VR_AD	HP_JACK_IN	2	2	HP_JACK_IN	ZOOM_VR_AD	1
3	KEY_AD0	HP_R_OUT	4	4	HP_R_OUT	KEY_AD0	3
5	XMODE_SW	HP_L_OUT	6	6	HP_L_OUT	XMODE_SW	5
7	XPOWER_SW	HP_GND	8	8	HP_GND	XPOWER_SW	7
9	XVTR_LED	EJECT_SW	10	10	XEJECT_SW	XVTR_LED	9
11	XMEM_LED	DEW_AD	12	12	DEW_AD	XMEM_LED	11
13	XCAM_LED	MODE_SW_A	14	14	MODE_SW_A	XCAM_LED	13
15	DV_2.8V	MODE_SW_B	16	16	MODE_SW_B	DV_2.8V	15
17	DV_2.8V	MODE_SW_C	18	18	MODE_SW_C	DV_2.8V	17
19	EP_13.5V	REC_PROOF	20	20	REC_PROOF	EP_13.5V	19
21	VTR_UNREG	CHIME_SDA	22	22	CHIME_SDA	VTR_UNREG	21
23	RP_4.6V	CHIME_SCK	24	24	CHIME_SCK	RP_4.6V	23
25	RP_4.6V	XCC_DOWN	26	26	XCC_DOWN	RP_4.6V	25
27	RP_2.8V	CAP_ON	28	28	CAP_ON	RP_2.8V	27
29	RP_2.8V	CAP_FWD	30	30	CAP_FWD	RP_2.8V	29
31	DRUM_VS	CAP_FG	32	32	CAP_FG	DRUM_VS	31
33	DRUM_VS	TAPE_TOP	34	34	TAPE_TOP	DRUM_VS	33
35	DRUM_VS	TAPE_END	36	36	TAPE_END	DRUM_VS	35
37	CAP_VS	SREEL_FG	38	38	SREEL_FG	CAP_VS	37
39	CAP_VS	TREEL_FG	40	40	TREEL_FG	CAP_VS	39
41	CAP_VS	XREEL_HALL_ON	42	42	XREEL_HALL_ON	CAP_VS	41
43	MT_5V	TAPE_LED_ON	44	44	TAPE_LED_ON	MT_5V	43
45	MT_5V	DRUM_FG	46	46	DRUM_FG	MT_5V	45
47	MT_5V	DRUM_PG	48	48	DRUM_PG	MT_5V	47
49	N.C	UNLOAD	50	50	UNLOAD	N.C	49
51	MT_GND	LOAD	52	52	LOAD	MT_GND	51
53	MT_GND	DRUM_ERROR	54	54	DRUM_ERROR	MT_GND	53
55	MT_GND	CAP_ERROR	56	56	CAP_ERROR	MT_GND	55
57	REG_GND	DRUM_PWM	58	58	DRUM_PWM	REG_GND	57
59	REG_GND	CAP_PWM	60	60	CAP_PWM	REG_GND	59
61	REG_GND	VSP_SO	62	62	VSP_SO	REG_GND	61
63	REG_GND	XCS_IC2501	64	64	XCS_IC2501	REG_GND	63
65	RF_IN	XVSP_SCK	66	66	XVSP_SCK	RF_IN	65
67	RF_MON	SPCK	68	68	SPCK	RF_MON	67
69	REG_GND	XRST_VTR	70	70	XRST_VTR	REG_GND	69
71	SWP	LM_LIM_DET	72	72	LM_LIM_DET	SWP	71
73	RF_SWP	CHIME_VDD	74	74	CHIME_VDD	RF_SWP	73
75	ALL_PS	RECA1	76	76	RECA1	ALL_PS	75
77	SW_PS	RECA2	78	78	RECA2	SW_PS	77
79	RECDT	RECCK	80	80	RECCK	RECDT	79

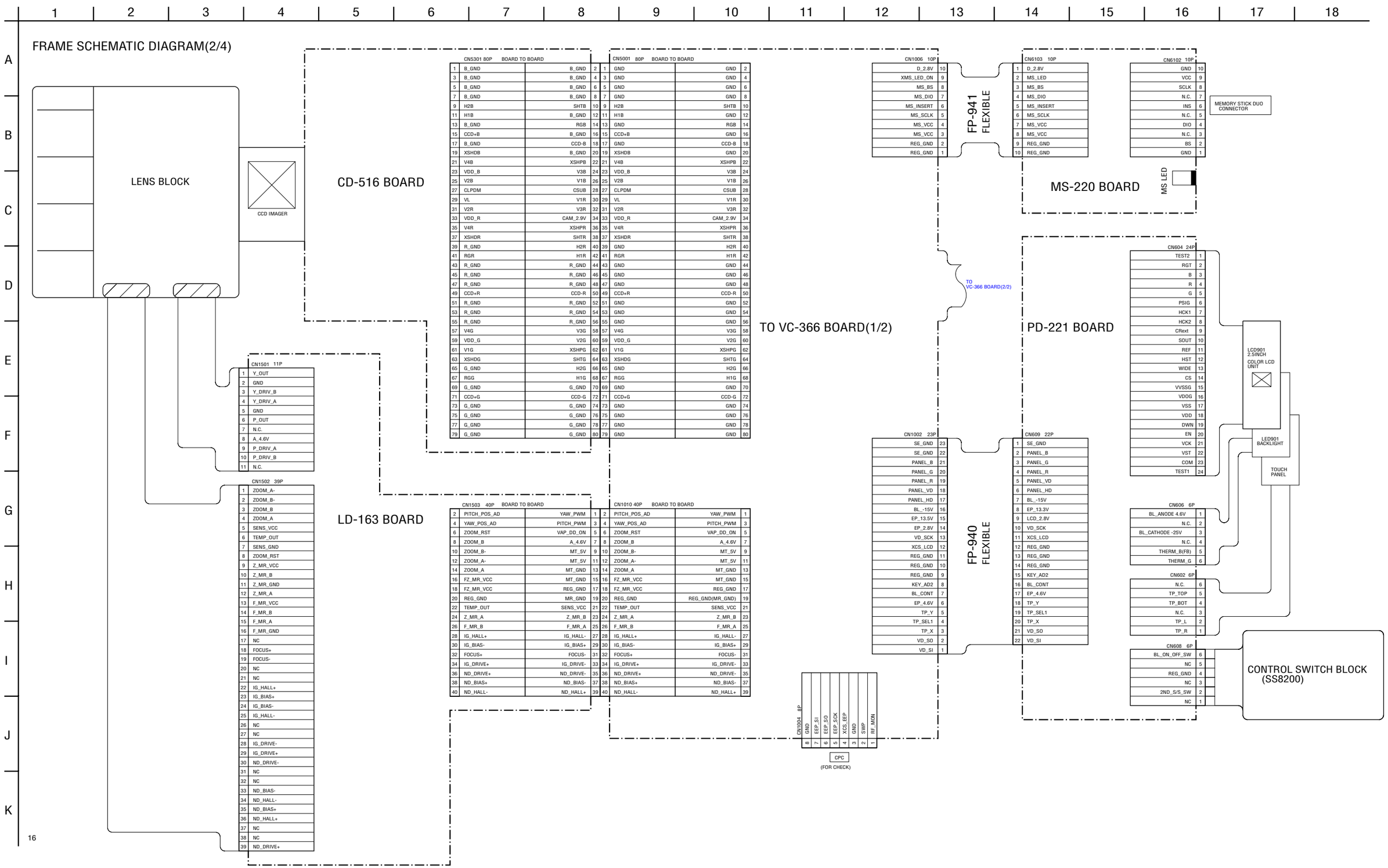
80	HP_JACK_IN	ZOOM_VR_AD	79	80	HP_JACK_IN	ZOOM_VR_AD	79
78	HP_R_OUT	KEY_AD0	77	78	HP_R_OUT	KEY_AD0	77
76	HP_L_OUT	XMODE_SW	75	76	HP_L_OUT	XMODE_SW	75
74	HP_GND	XPOWER_SW	73	74	HP_GND	XPOWER_SW	73
72	XEJECT_SW	XVTR_LED	71	72	XEJECT_SW	XVTR_LED	71
70	DEW_AD	XMEM_LED	69	70	DEW_AD	XMEM_LED	69
68	MODE_SW_A	XCAM_LED	67	68	MODE_SW_A	XCAM_LED	67
66	MODE_SW_B	DV_2.8V	65	66	MODE_SW_B	DV_2.8V	65
64	MODE_SW_C	DV_2.8V	63	64	MODE_SW_C	DV_2.8V	63
62	REC_PROOF	EP_13.5V	61	62	REC_PROOF	EP_13.5V	61
60	CHIME_SDA	VTR_UNREG	59	60	CHIME_SDA	VTR_UNREG	59
58	CHIME_SCK	RP_4.6V	57	58	CHIME_SCK	RP_4.6V	57
56	XCC_DOWN	RP_4.6V	55	56	XCC_DOWN	RP_4.6V	55
54	CAP_ON	RP_2.8V	53	54	CAP_ON	RP_2.8V	53
52	CAP_FWD	RP_2.8V	51	52	CAP_FWD	RP_2.8V	51
50	CAP_FG	DRUM_VS	49	50	CAP_FG	DRUM_VS	49
48	TAPE_TOP	DRUM_VS	47	48	TAPE_TOP	DRUM_VS	47
46	TAPE_END	DRUM_VS	45	46	TAPE_END	DRUM_VS	45
44	SREEL_FG	CAP_VS	43	44	SREEL_FG	CAP_VS	43
42	TREEL_FG	CAP_VS	41	42	TREEL_FG	CAP_VS	41
40	XREEL_HALL_ON	CAP_VS	39	40	XREEL_HALL_ON	CAP_VS	39
38	TAPE_LED_ON	MT_5V	37	38	TAPE_LED_ON	MT_5V	37
36	DRUM_FG	MT_5V	35	36	DRUM_FG	MT_5V	35
34	DRUM_PG	MT_5V	33	34	DRUM_PG	MT_5V	33
32	UNLOAD	LOAD	31	32	UNLOAD	LOAD	31
30	KEY_AD5	MT_GND	29	30	KEY_AD5	MT_GND	29
28	DRUM_ERROR	MT_GND	27	28	DRUM_ERROR	MT_GND	27
26	CAP_ERROR	MT_GND	25	26	CAP_ERROR	MT_GND	25
24	DRUM_PWM	REG_GND	23	24	DRUM_PWM	REG_GND	23
22	CAP_PWM	REG_GND	21	22	CAP_PWM	REG_GND	21
20	VSP_SO	REG_GND	19	20	VSP_SO	REG_GND	19
18	XCS_IC2501	REG_GND	17	18	XCS_IC2501	REG_GND	17
16	XVSP_SCK	RF_IN	15	16	XVSP_SCK	RF_IN	15
14	SPCK	RF_MON	13	14	SPCK	RF_MON	13
12	XRST_VTR	REG_GND	11	12	XRST_VTR	REG_GND	11
10	LM_LIM_DET	SWP	9	10	LM_LIM_DET	SWP	9
8	CHIME_VDD	RF_SWP	7	8	CHIME_VDD	RF_SWP	7
6	RECA1	ALL_PS	5	6	RECA1	ALL_PS	5
4	RECA2	SW_PS	3	4	RECA2	SW_PS	3
2	RECCK	RECDT	1	2	RECCK	RECDT	1

1	XBATT_INFO_SW	SP+	2	2	SP+	XBATT_INFO_SW	1
3	XCAM_LED	SP-	4	4	SP-	XCAM_LED	3
5	XMEM_LED	XMODE_SW	6	6	XMODE_SW	XMEM_LED	5
7	XPOWER_SW	XVTR_LED	8	8	XVTR_LED	XPOWER_SW	7
9	VD_SCK	SCHARGE_ON	10	10	SCHARGE_ON	VD_SCK	9
11	VD_SI	XSTROBO_READY	12	12	XSTROBO_READY	VD_SI	11
13	XCS_EVF	XSCHARGE_FULL	14	14	XSCHARGE_FULL	XCS_EVF	13
15	VD_SO	STROBO_LED	16	16	STROBO_LED	VD_SO	15
17	EXT_STROBE_ON	MIC_IN	18	18	MIC_IN	EXT_STROBE_ON	17
19	SDC_IN	XMIC_MONO	20	20	XMIC_MONO	SDC_IN	19
21	XVIDEO_IN	IC2201_RXDO	22	22	IC2201_RXDO	XVIDEO_IN	21
23	XCS_IC7101	XDS_RESET	24	24	XDS_RESET	XCS_IC7101	23
25	MF_A	OSD_V	26	26	OSD_V	MF_A	25
27	MF_LED	CAM_DD_ON	28	28	CAM_DD_ON	MF_LED	27
29	STROBO_ON	IC8201_SCKO	30	30	IC8201_SCKO	STROBO_ON	29
31	MF_B	IC8201_TXDO	32	32	IC8201_TXDO	MF_B	31
33	REG_GND	IC8201_CS	34	34	IC8201_CS	REG_GND	33
35	IC8201_C_OUT	XVM_MAD	36	36	XVM_MAD	IC8201_C_OUT	35
37	ACC_CONT	BEEP	38	38	BEEP	ACC_CONT	37
39	AGC_CONT	EVF_B	40	40	EVF_B	AGC_CONT	39
41	IC8201_Y_OUT	EVF_G/BW_Y	42	42	EVF_G/BW_Y	IC8201_Y_OUT	41
43	IC7101_C_OUT	EVF_R	44	44	EVF_R	IC7101_C_OUT	43
45	IC7101_Y_OUT	ZOOM_MIC_CONT	46	46	ZOOM_MIC_CONT	IC7101_Y_OUT	45
47	REG_GND	EVF_HD	48	48	EVF_HD	REG_GND	47
49	IC7500_SEL	EVF_VD	50	50	EVF_VD	IC7500_SEL	49
51	XSYS_RST	HP_GND	52	52	HP_GND	XSYS_RST	51
53	XAUDIO_IN	HP_L_OUT	54	54	HP_L_OUT	XAUDIO_IN	53
55	VSP_SO	HP_R_OUT	56	56	HP_R_OUT	VSP_SO	55
57	XVSP_SCK	XEJECT_SW	58	58	XEJECT_SW	XVSP_SCK	57
59	XCS_IC7500	XCC_DOWN	60	60	XCC_DOWN	XCS_IC7500	59
61	XCS_IC6500	SFD_RCK	62	62	SFD_RCK	XCS_IC6500	61
63	CS_AUVOL	SFD_FCK	64	64	SFD_FCK	CS_AUVOL	63
65	XPWAD	SFD_LRCK	66	66	SFD_LRCK	XPWAD	65
67	XPWDA	DATA_FROM_SFD1	68	68	DATA_FROM_SFD1	XPWDA	67
69	DEM1	DATA_TO_SFD1	70	70	DATA_TO_SFD1	DEM1	69
71	DEM0	DATA_TO_SFD2	72	72	D_1.9V	DEM0	71
73	LINEOUT_V	D_1.9V	74	74	D_1.9V	LINEOUT_V	73
75	EP_4.6V	CAM_2.9V	76	76	CAM_2.9V	EP_4.6V	75
77	A_4.6V	CAM_2.9V	78	78	CAM_2.9V	A_4.6V	77
79	RP_4.6V	D_1.2V	80	80	D_1.2V	RP_4.6V	79
81	D_2.8V	A_1.5V	82	82	A_1.5V	D_2.8V	81
83	D_2.8V	D_1.5V	84	84	D_1.5V	D_2.8V	83
85	EP_2.8V	D_1.5V	86	86	D_1.5V	EP_2.8V	85
87	RP_2.8V	D_1.5V	88	88	D_1.5V	RP_2.8V	87
89	A_2.8V	D_1.5V	90	90	D_1.5V	A_2.8V	89
91	EP_13.5V	CAM_3.6V	92	92	CAM_3.6V	EP_13.5V	91
93	MT_5V	BL_-15V	94	94	BL_-15V	MT_5V	93
95	MT_5V	CAM_-7.5V	96	96	CAM_-7.5V	MT_5V	95
97	MT_5V	CAM_15V	98	98	CAM_15V	MT_5V	97
99	MT_GND	DRUM_VS	100	100	DRUM_VS	MT_GND	99
101	MT_GND	DRUM_VS	102	102	DRUM_VS	MT_GND	101
103	MT_GND	DRUM_VS	104	104	DRUM_VS	MT_GND	103
105	CAP_ERROR	CAP_VS	106	106	CAP_VS	CAP_ERROR	105
107	DRUM_ERROR	CAP_VS	108	108	CAP_VS	DRUM_ERROR	107
109	VTR_UNREG	CAP_VS	110	110	CAP_VS	VTR_UNREG	109
111	BL_CONT	KEY_AD3	112	112	KEY_AD3	BL_CONT	111
113	REG_GND	REG_GND	114	114	REG_GND	REG_GND	113
115	REG_GND	REG_GND	116	116	REG_GND	REG_GND	115
117	REG_GND	REG_GND	118	118	REG_GND	REG_GND	117
119	REG_GND	REG_GND	120	120	REG_GND	REG_GND	119

27	FG_GND	HALL_VCC	27	27	HALL_VCC	FG_GND	27
26	FG_GND	TREEL+	26	26	TREEL+	FG_GND	26
25	FG2	TREEL-	25	25	TREEL-	FG2	25
24	FG_VCC	HALL_GND	24	24	HALL_GND	FG_VCC	24
23	FG_VCC	SREEL-	23	23	SREEL-	FG_VCC	23
22	FG1	SREEL+	22	22	SREEL+	FG1	22
21	N.C	END_GND	21	21	END_GND	N.C	21
20	CAP_U	TAPE_END	20	20	TAPE_END	CAP_U	20
19	CAP_U	TAPE_LED_A	19	19	TAPE_LED_A	CAP_U	19
18	CAP_U	TAPE_LED_K	18	18	TAPE_LED_K	CAP_U	18
17	CAP_U	XCCDOWN_SW	17	17	XCCDOWN_SW	CAP_U	17
16	HE_VCC	MICREC_SW_GND	16	16	MICREC_SW_GND	HE_VCC	16
15	WHE-	CHIME_SCK	15	15	CHIME_SCK	WHE-	15
14	CAP_W	CHIME_SDA	14	14	CHIME_SDA	CAP_W	14
13	CAP_W	CHIME_VDD	13	13	CHIME_VDD	CAP_W	13
12	CAP_W	XREC_PROOF	12	12	XREC_PROOF	CAP_W	12
11	CAP_W	TAPE_TOP	11	11	TAPE_TOP	CAP_W	11
10	WHE+	MODE_SW_COM/SW_GND	10	10	MODE_SW_COM/SW_GND	WHE+	10
9	VHE-	XMODE_SW_C	9	9	XMODE_SW_C	VHE-	9
8	VHE+	XMODE_SW_B	8	8	XMODE_SW_B	VHE+	8
7	UHE-	XMODE_SW_A	7	7	XMODE_SW_A	UHE-	7
6	UHE+	DEW-	6	6	DEW-	UHE+	6
5	HE_GND	DEW+	5	5	DEW+	HE_GND	5
4	CAP_V	LM_UNLOAD	4	4	LM_UNLOAD	CAP_V	4
3	CAP_V	LM_UNLOAD	3	3	LM_UNLOAD	CAP_V	3
2	CAP_V	LM_LOAD	2	2	LM_LOAD	CAP_V	2
1	CAP_V	LM_LOAD	1	1	LM_LOAD	CAP_V	1

10	DRUM_V	GND	10	10	GND	DRUM_V	10
9	DRUM_V	XEVEN	9	9	XEVEN	DRUM_V	9
8	DRUM_W	YEVEN	8	8	YEVEN	DRUM_W	8
7	DRUM_W	GND	7	7	GND	DRUM_W	7
6	DRUM_U	YODD	6	6	YODD	DRUM_U	6
5	DRUM_U	XODD	5	5	XODD	DRUM_U	5
4	M_COM	GND	4	4	GND	M_COM	4
3	FG/PG_COM	XSDL	3	3	XSDL	FG/PG_COM	3
2	PG	YSDL	2	2	YSDL	PG	2
1	FG	GND	1	1	GND	FG	1

FRAME SCHEMATIC DIAGRAM (2/4)



FRAME SCHEMATIC DIAGRAM (3/4)

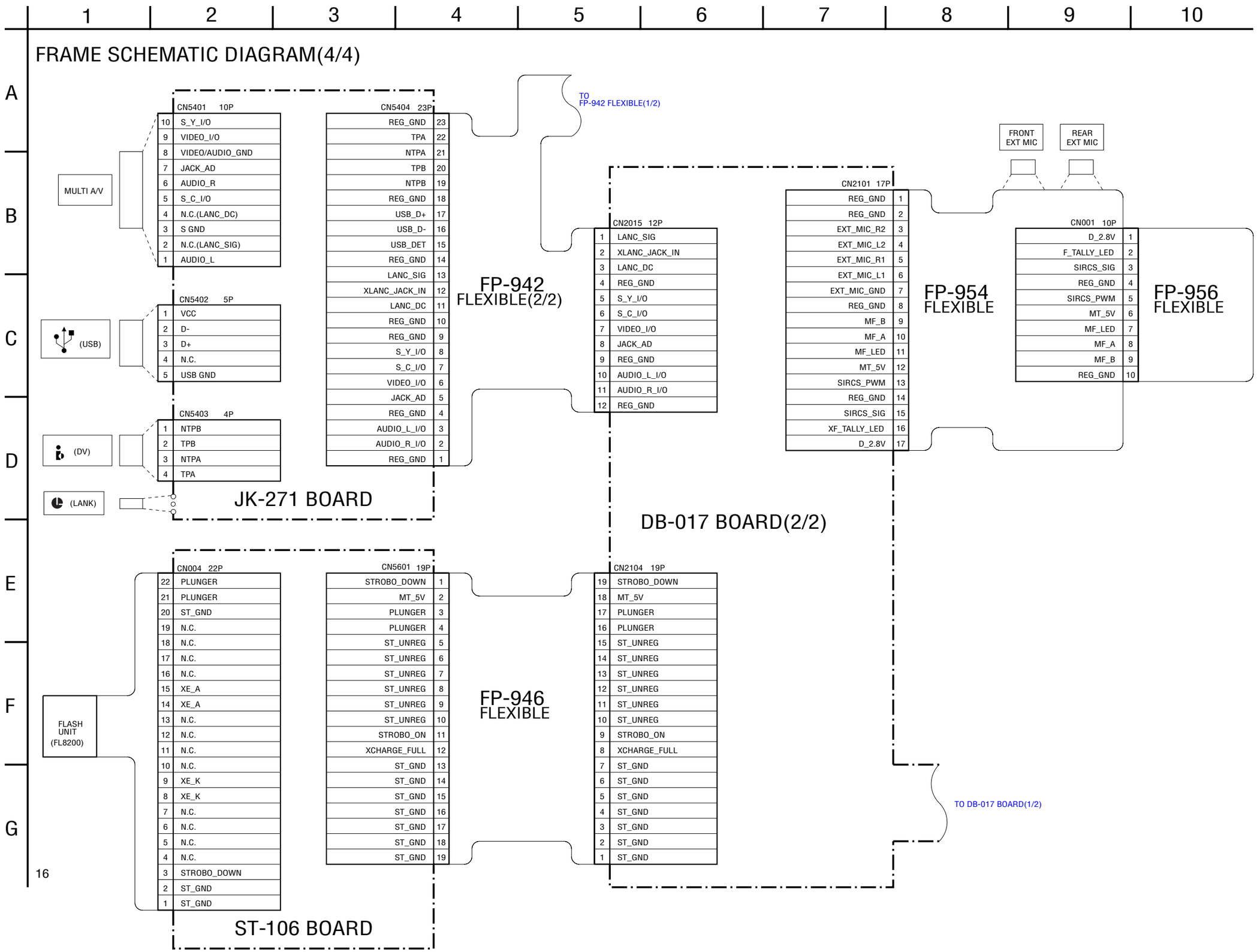
FRAME SCHEMATIC DIAGRAM(3/4)

TO VC-366 BOARD CN1001

CN2106 120P
BOARD TO BOARD

| | | |

FRAME SCHEMATIC DIAGRAM (4/4)



4-2. SCHEMATIC DIAGRAMS

Link

CD-516 BOARD (CCD IMAGER)	FP-958 FLEXIBLE BOARD (FUNCTION KEY)
LD-163 BOARD (LENS DRIVE)	MS-220 BOARD (MS CONNECTOR)
RP-241 BOARD (1/3) (REC/PB RF AMP)	LB-015 BOARD (EVF, EVF BL)
RP-241 BOARD (2/3) (MECHA CONTROL)	FP-953 FLEXIBLE BOARD (RESET, FLASH SW)
RP-241 BOARD (3/3) (CONNECTOR)	ST-106 BOARD (FLASH DRIVE)
CONTROL SWITCH BLOCK (PS8200)	FLASH UNIT (FL8200)
PD-221 BOARD (LCD RGB DRIVE, TIMING GENERATOR, BACK LIGHT)	FP-954 FLEXIBLE BOARD (MIC JACK)
CONTROL SWITCH BLOCK (SS8200)	FP-956 FLEXIBLE BOARD (MF SENSOR, SIRCS)
JK-271 BOARD (CONNECTOR)	FP-939 FLEXIBLE BOARD (RELAY)
SE-149 BOARD (PITCH/YAW SENSOR AMP)	FP-228/FP-467/FP-826 FLEXIBLE BOARD
FP-955 FLEXIBLE BOARD (PANEL REV)	

COMMON NOTE FOR SCHEMATIC DIAGRAMS

(ENGLISH)

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in µF unless otherwise noted. pF : µµF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts. New parts must be attached after removal of chip. Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

Example C541 22U TA A L452 10UH 2520

Kinds of capacitor
Temperature characteristics
External dimensions (mm)

- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used. In such cases, the unused circuits may be indicated.
- Parts with * differ according to the model/destination. Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+,–) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO/SERVO SIGNAL
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

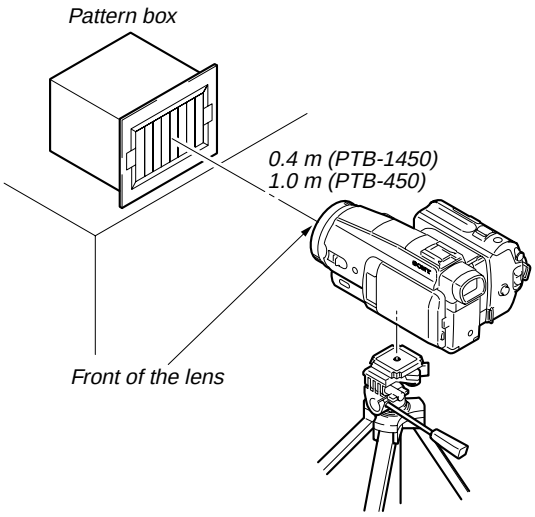
(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms. (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

Precautions Upon Replacing CCD imager

- The CD-516 board mounted as a repair part is not equipped with a CCD imager. When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC. In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

1. Connection



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

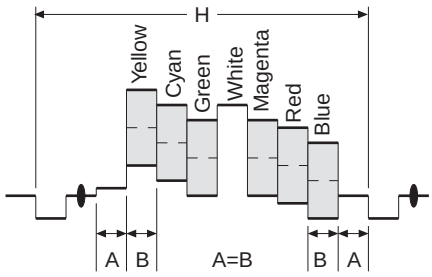


Fig. a (Video output terminal output waveform)

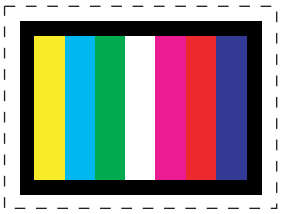


Fig.b (Picture on monitor TV)

When indicating parts by reference number, please include the board name.

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(JAPANESE)

回路図共通ノート
（他に必要なノートは各ブロックに記載してあります）
【回路図ノート】

・ケミコン，タンタルを除くコンデンサで，耐圧50V以下のものはその耐圧を省略。単位はすべてμF（pはpF）。
・チップ抵抗で指示のないものは，1／10W以下。
kΩ＝1000Ω，MΩ＝1000kΩ
・チップ部品交換時の注意
取り外した部品は再使用せず，未使用の部品をご使用ください。
タンタルコンデンサのマイナス側は熱に弱いため注意してください。
・チップ部品には下記のように表示したものがあります。

例	C 541	L 452
	22U	10UH
	TA　A	2520
	↑　↑	↑
	種類　温度特性	外形寸法（mm）

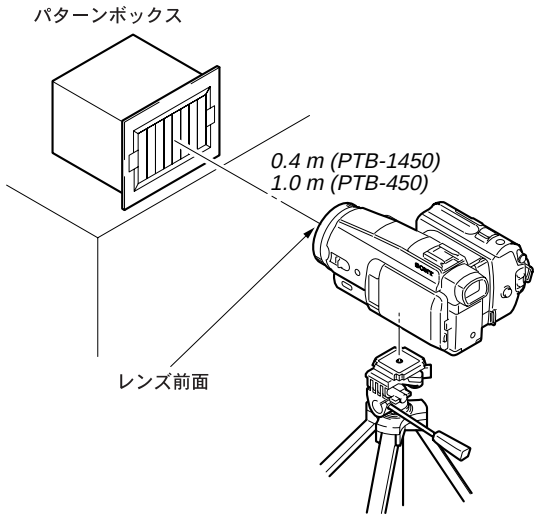
・抵抗，コンデンサ，ICなど定数にXXがあるものは，使用していない事を示しています。このため，使用していない回路が記載されている事があります。
・※印のある部品は，機種などにより異なりますので機能別マウントー覧表を参照してください。
・可変抵抗と半固定抵抗で，B特性の表示を省略。
・信号名表記について，下記のような場合があります。
XEDIT → $\overline{\text{EDIT}}$　　PB/XREC → PB/$\overline{\text{REC}}$
・―[抵抗]―は不燃性抵抗。
・―[ヒューズ抵抗]―はヒューズ抵抗。
・□はパネル表示名称。
・▬はB＋ライン。
・▬ ▬ ▬はB－ライン。
・⇨はBライン（＋，－）の入出力方向を示す。
・▭は調整名称。
・▬はビデオ信号（アナログ）。
・▬はオーディオ信号（アナログ）。
・▬はビデオ/オーディオ信号（アナログ）。
・▬はビデオ/オーディオ/サーボ信号。
・▬はサーボ信号。
・○番号は，波形図の照合番号。

CCDイメージャ交換時の注意
・補修部品として供給されるCD-516 基板には、CCDイメージャがマウントされていません。
CD-516 基板を交換する時は、旧基板よりCCDイメージャを外し、新基板へ再度取り付けてください。
・CCDイメージャを交換した場合は、カメラ部の全調整を行ってください。
・CCDイメージャは構造上、静電気により破壊される恐れがあるため、MOS ICと同様に注意して取り扱ってください。
また、受光部にはゴミの付着、および強い光がはいることのないように注意してください。

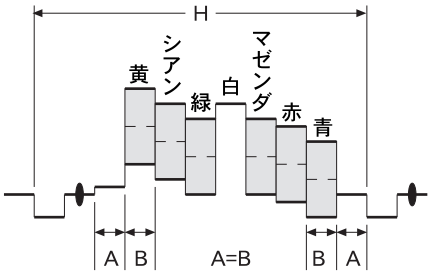
【電圧・波形測定条件ノート】

・電圧値及び信号波形はパターンボックスのカラーバーチャートを被写体としたときの測定点対アース間の参考値。
（デジタルマルチメータ；入力インピーダンス　DC10MΩ使用）
・使用テスタの入力インピーダンスにより電圧値が多少異なります。

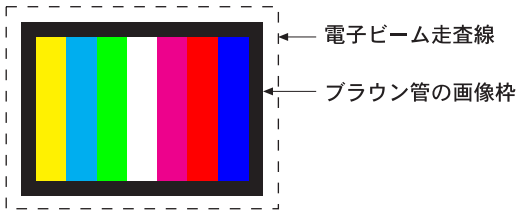
1. 接続図



2. 図a及び図bの波形が得られるように画枠調整して下さい。



図a（映像入出力端子出力波形）



図b（テレビモニタの映像）

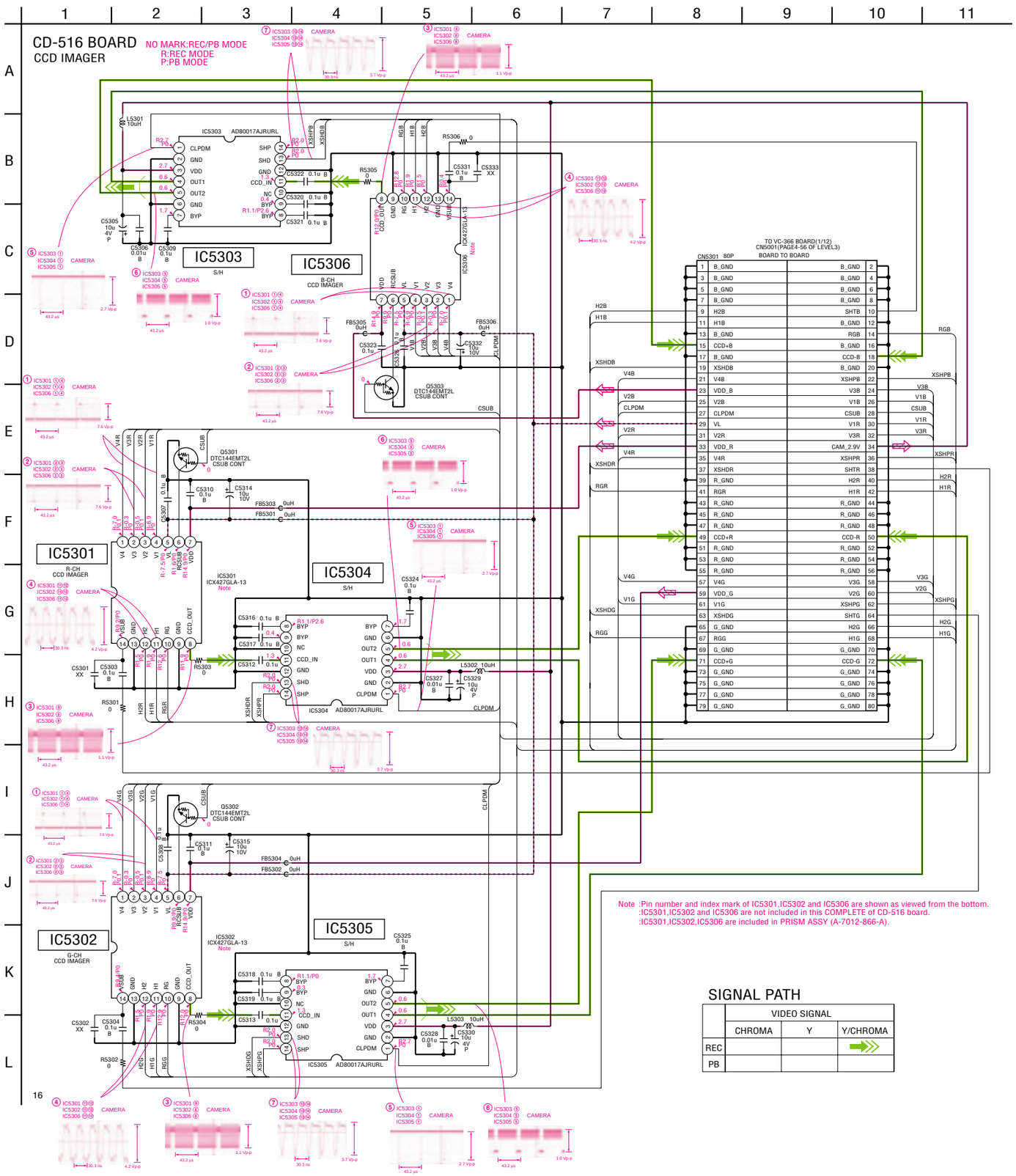
⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定して下さい。

4-2. SCHEMATIC DIAGRAMS

For Schematic Diagram

• Refer to page 4-81 for printed wiring board.

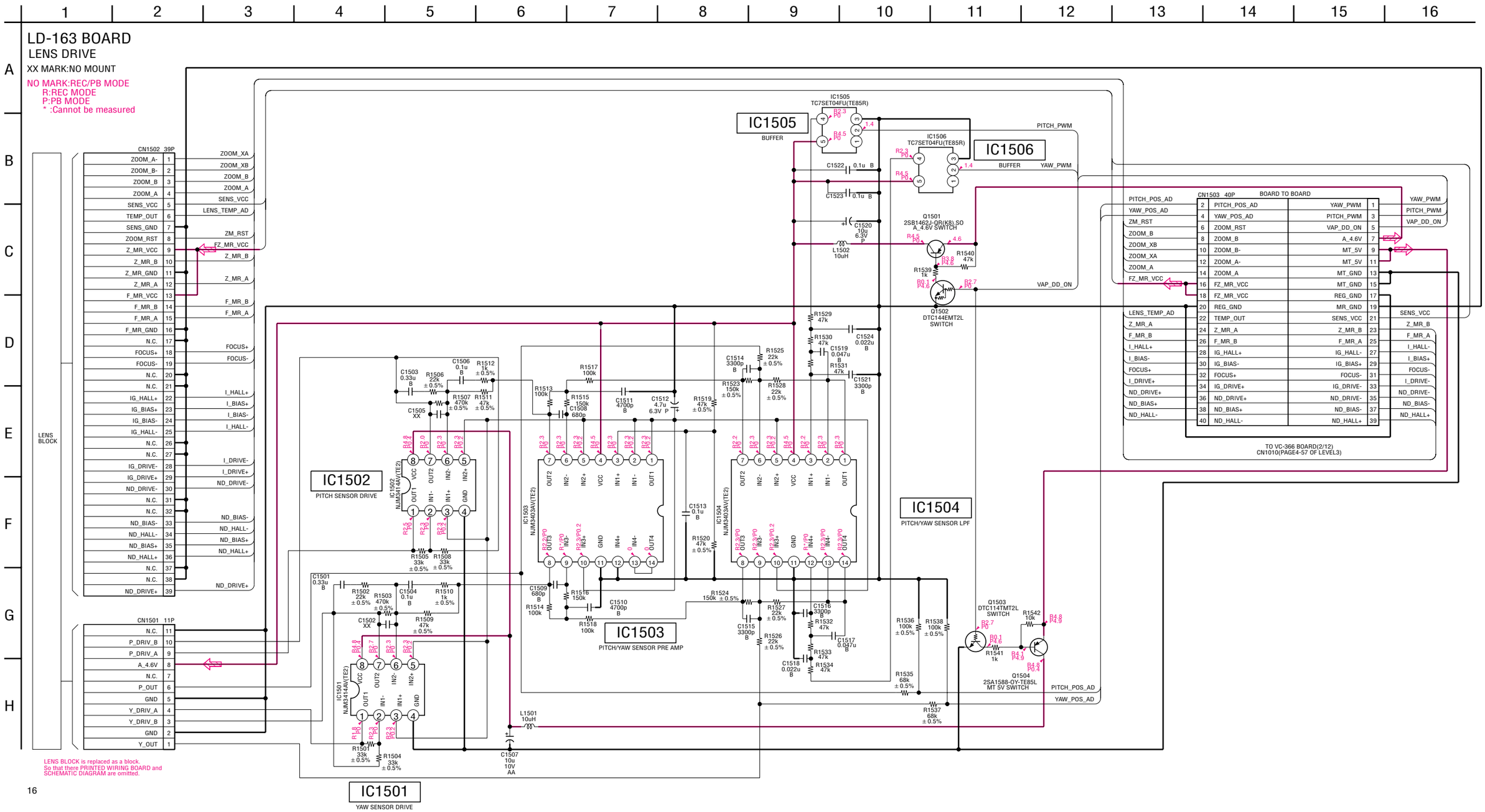


SIGNAL PATH

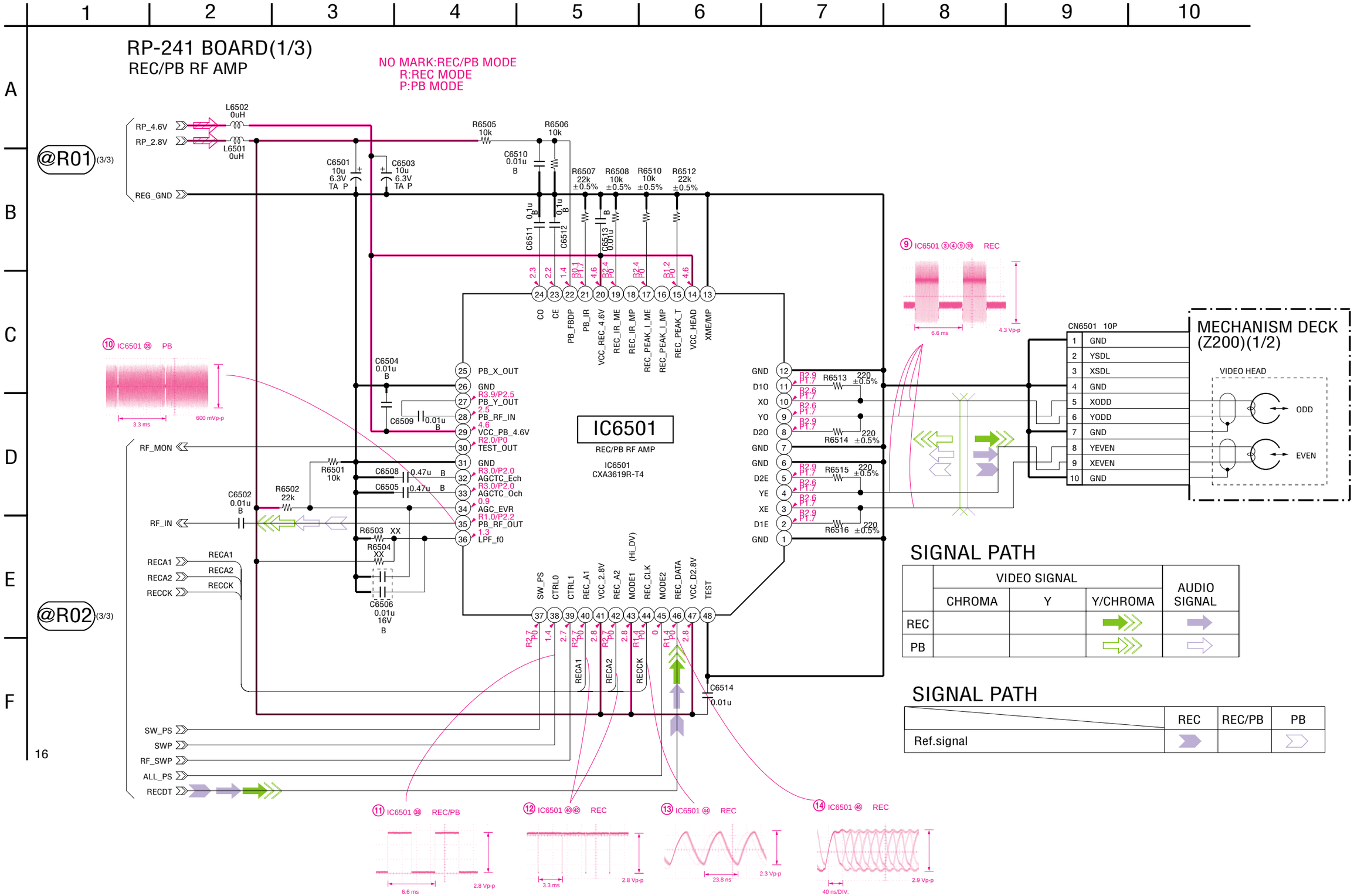
	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			⋙
PB			

For Schematic Diagram

• Refer to page 4-83 for printed wiring board.



For Schematic Diagram
• Refer to page 4-87 for printed wiring board.



SIGNAL PATH

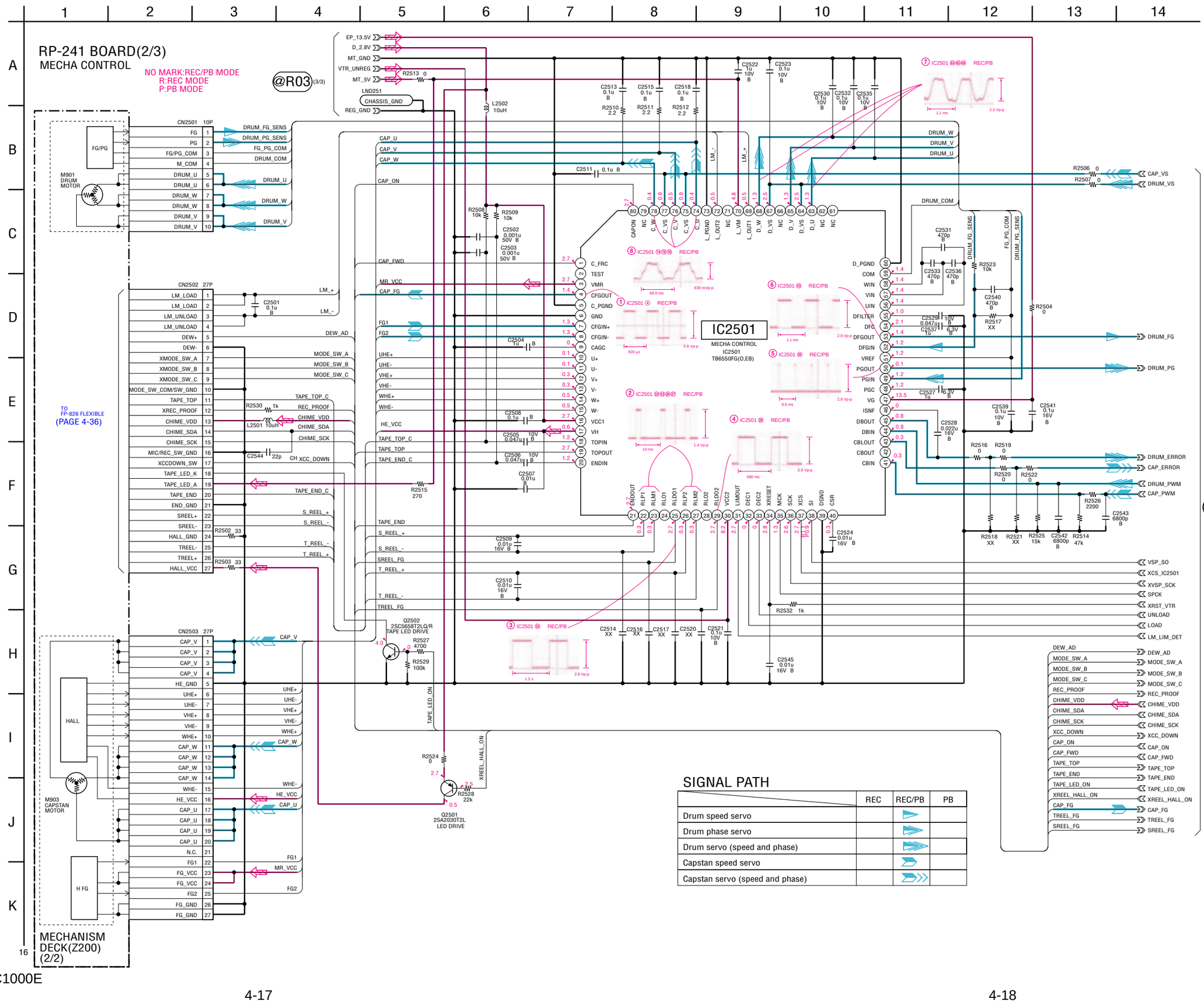
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC			⇒	⇒
PB			⇨	⇨

SIGNAL PATH

	REC	REC/PB	PB
Ref.signal	⇒		⇨

For Schematic Diagram

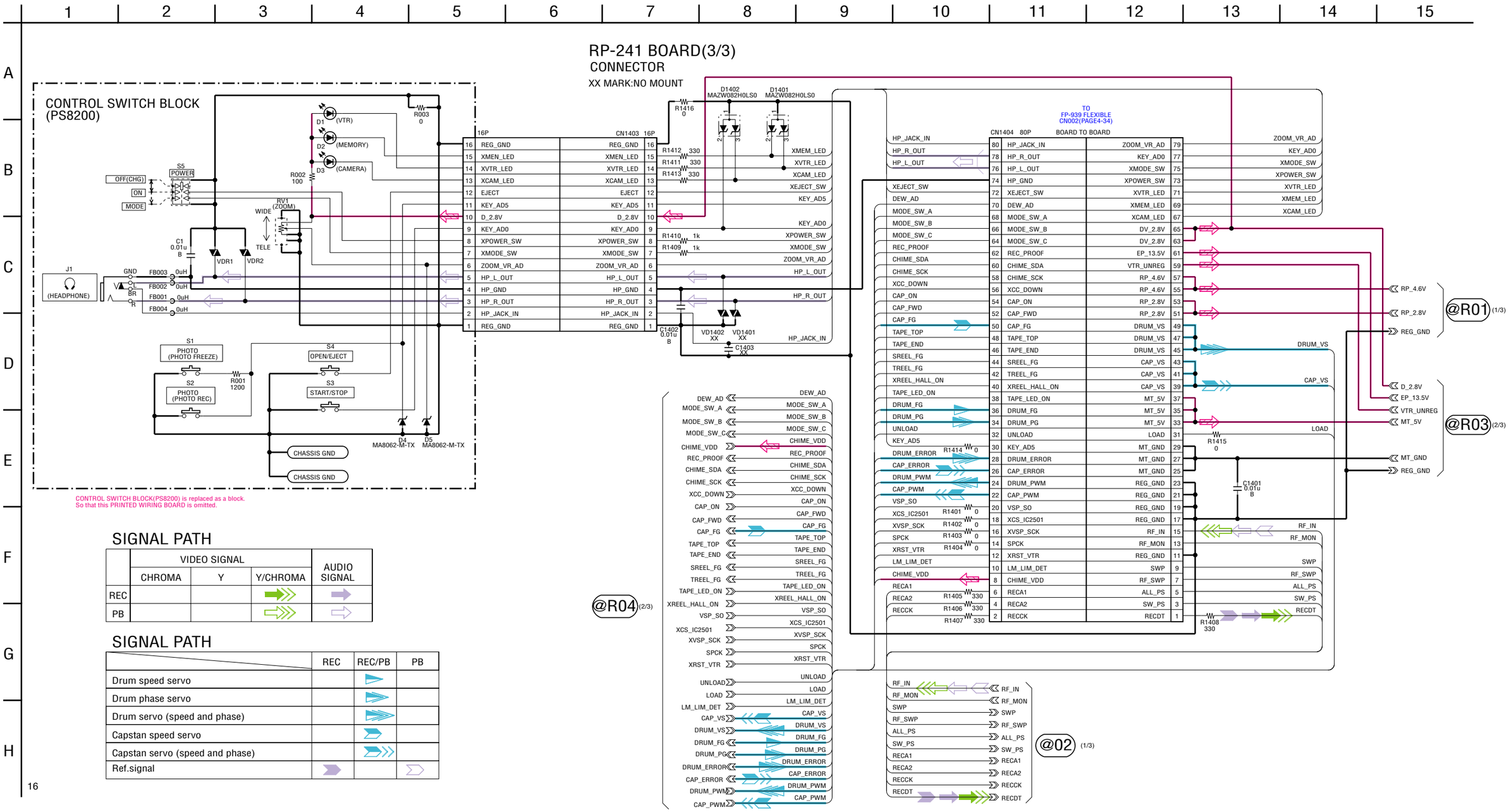
• Refer to page 4-87 for printed wiring board.



SIGNAL PATH	REC	REC/PB	PB
Drum speed servo		▶	
Drum phase servo		▶	
Drum servo (speed and phase)		▶	
Capstan speed servo		▶	
Capstan servo (speed and phase)		▶	

For Schematic Diagram

• Refer to page 4-87 for printed wiring board of RP-241.



SIGNAL PATH

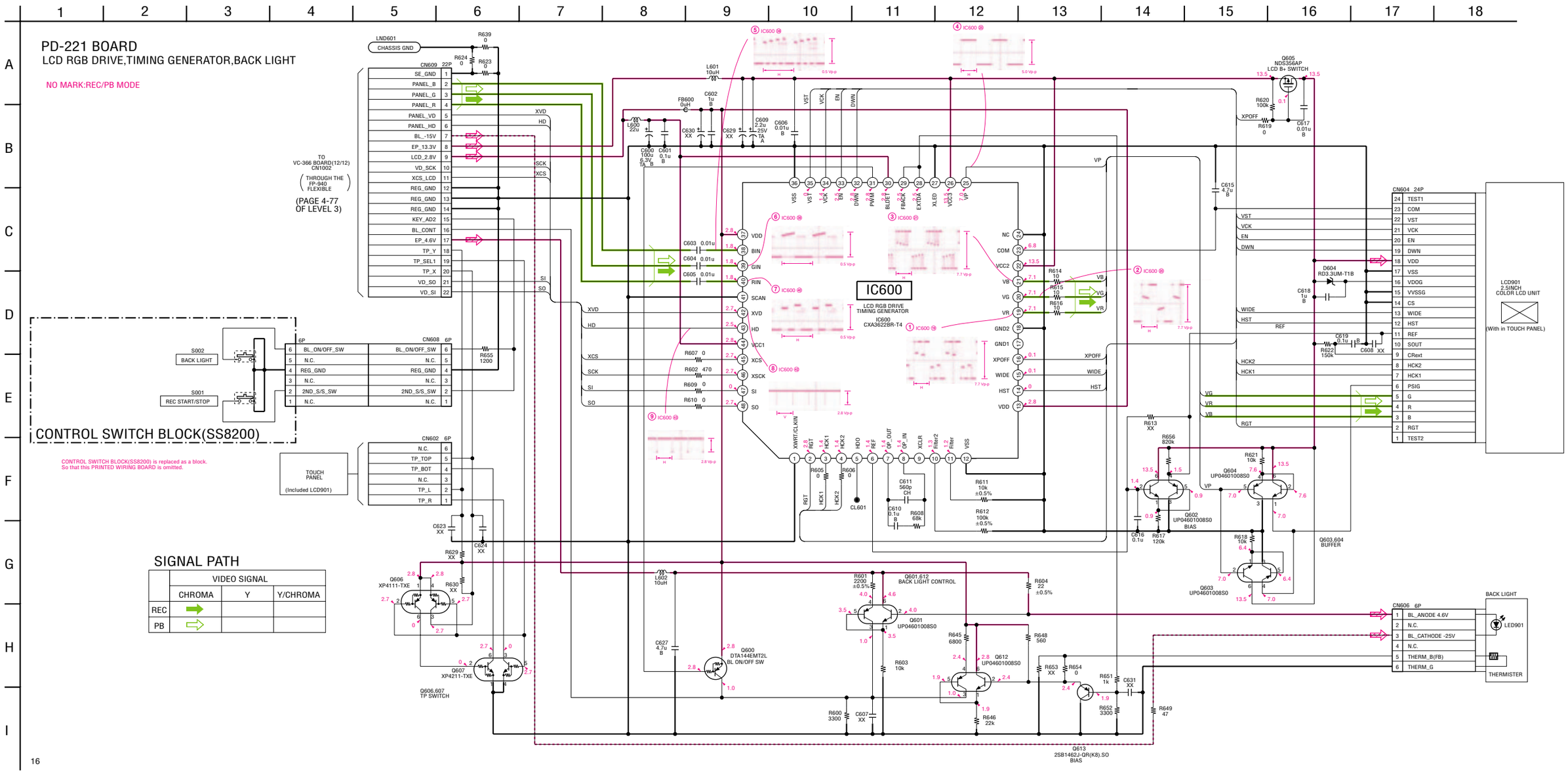
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC				
PB				

SIGNAL PATH

	REC	REC/PB	PB
Drum speed servo			
Drum phase servo			
Drum servo (speed and phase)			
Capstan speed servo			
Capstan servo (speed and phase)			
Ref.signal			

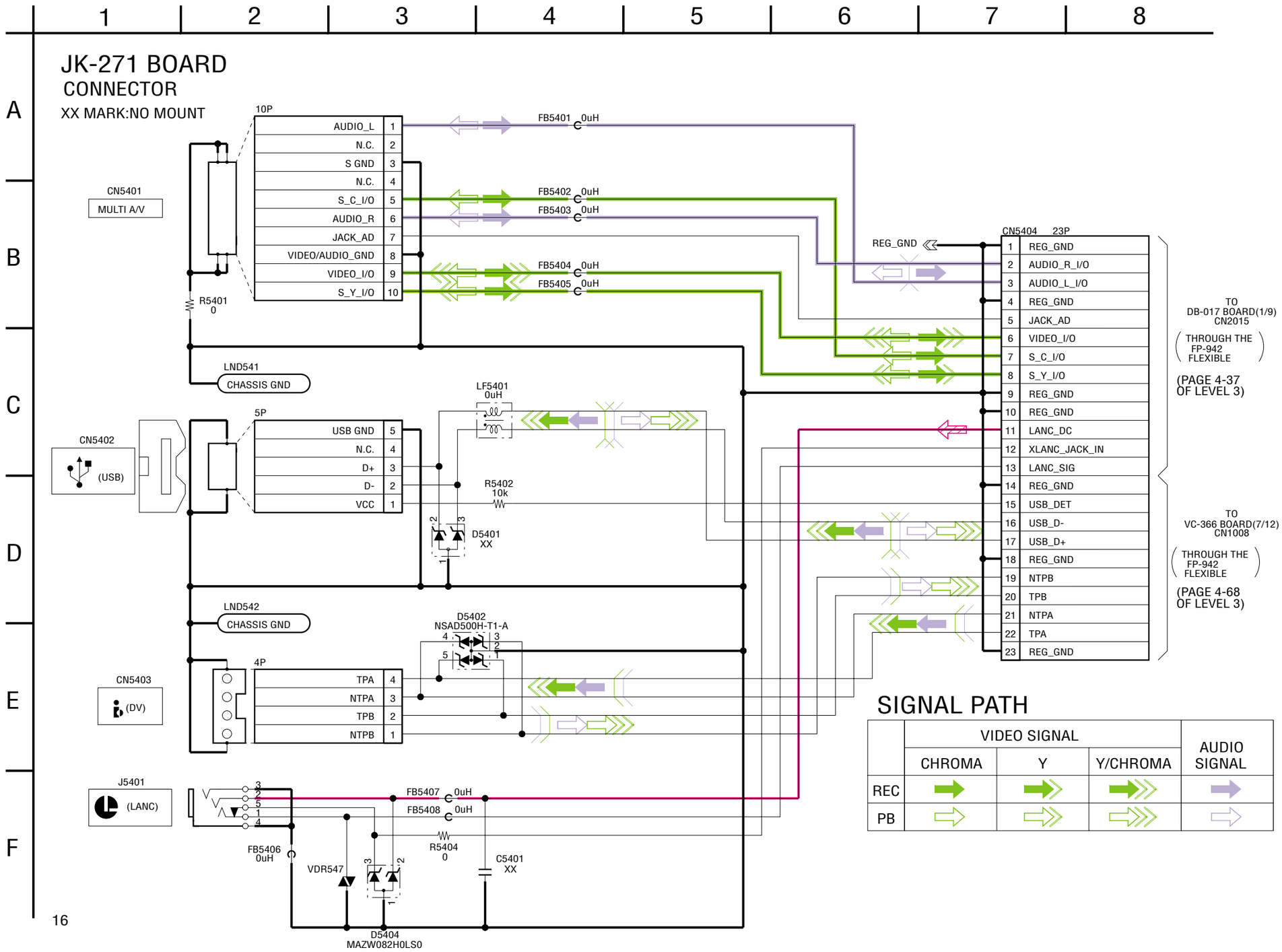
For Schematic Diagram

• Refer to page 4-89 for printed wiring board of PD-221.



For Schematic Diagram

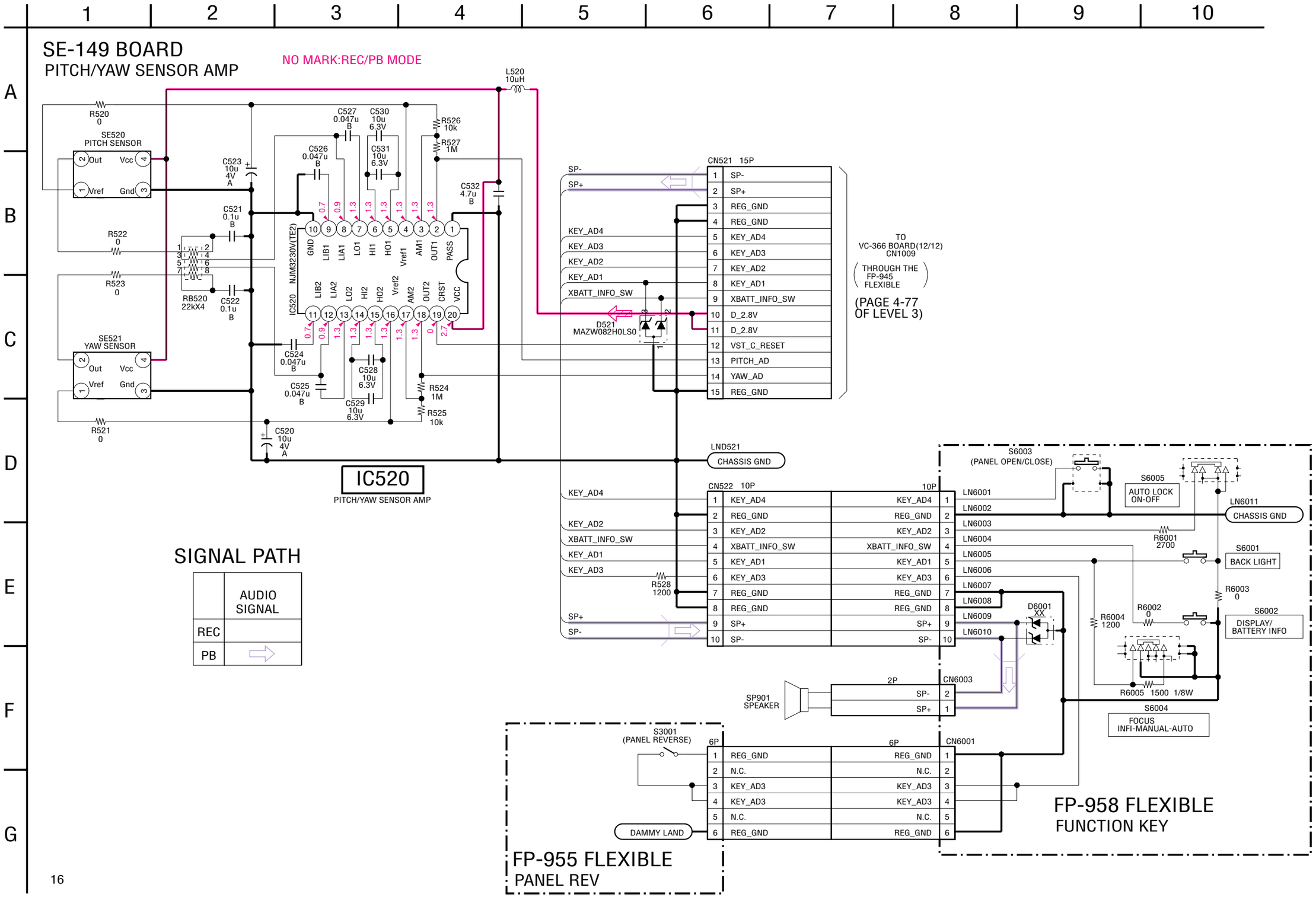
• Refer to page 4-91 for printed wiring board.



SIGNAL PATH

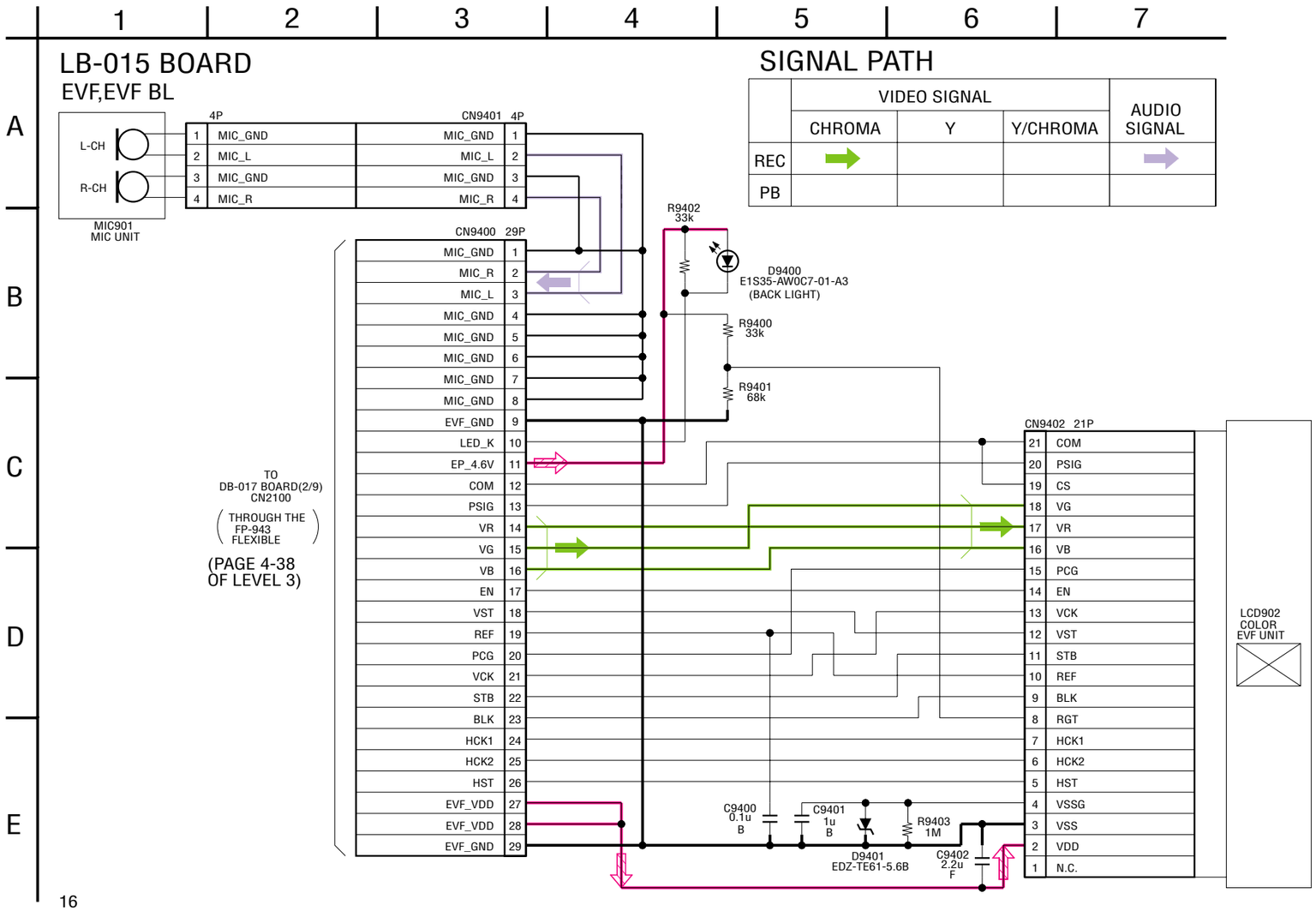
	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	→	→	→	→
PB	⇨	⇨	⇨	⇨

For Schematic Diagram
- Refer to page 4-93 for printed wiring board of SE-149.
- Refer to page 4-103 for flexible board of FP-958.
- Refer to page 4-103 for flexible board of FP-955.



For Schematic Diagram
- Refer to page 4-95 for printed wiring board of MS-220.
- Refer to page 4-96 for printed wiring board of LB-015.
- Refer to page 4-99 for printed flexible board of FP-953.

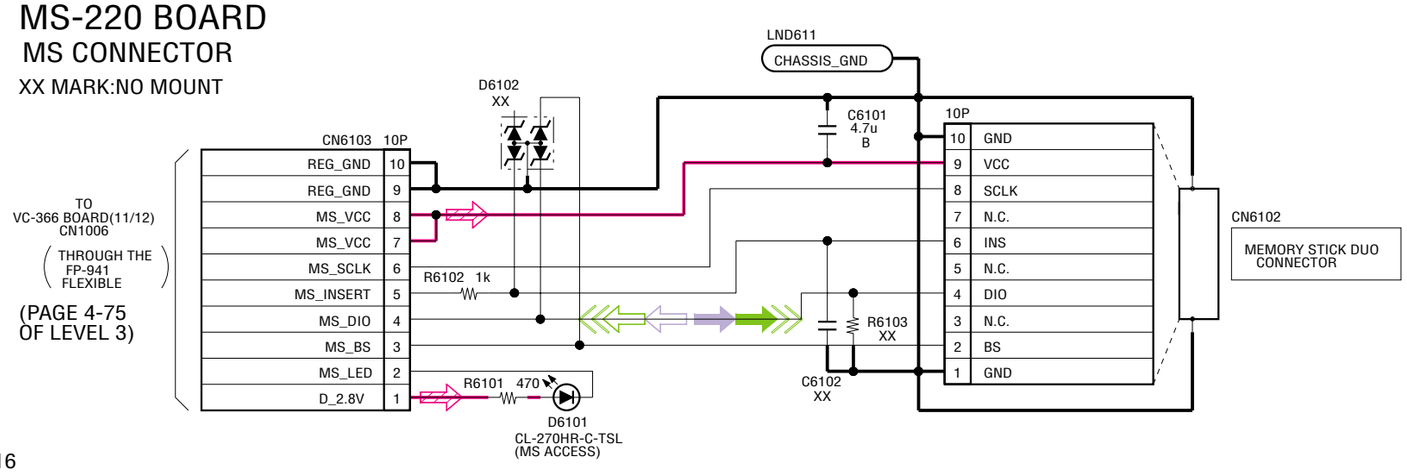
LB-015 BOARD
EVF,EVF BL



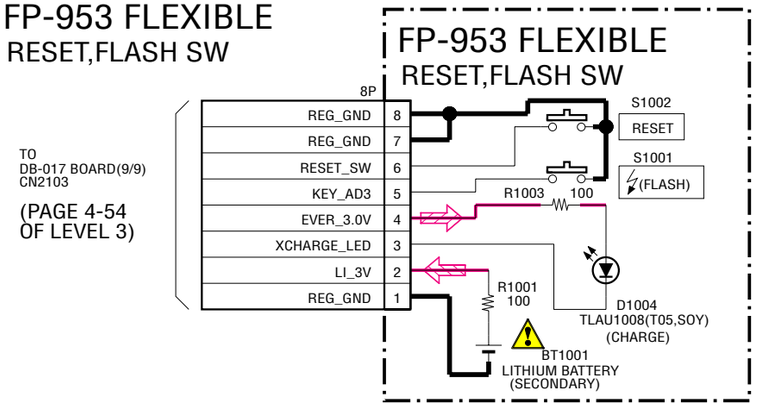
SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	→			→
PB				

MS-220 BOARD
MS CONNECTOR
XX MARK:NO MOUNT



FP-953 FLEXIBLE
RESET,FLASH SW



SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC			→	→
PB			⇢	⇢

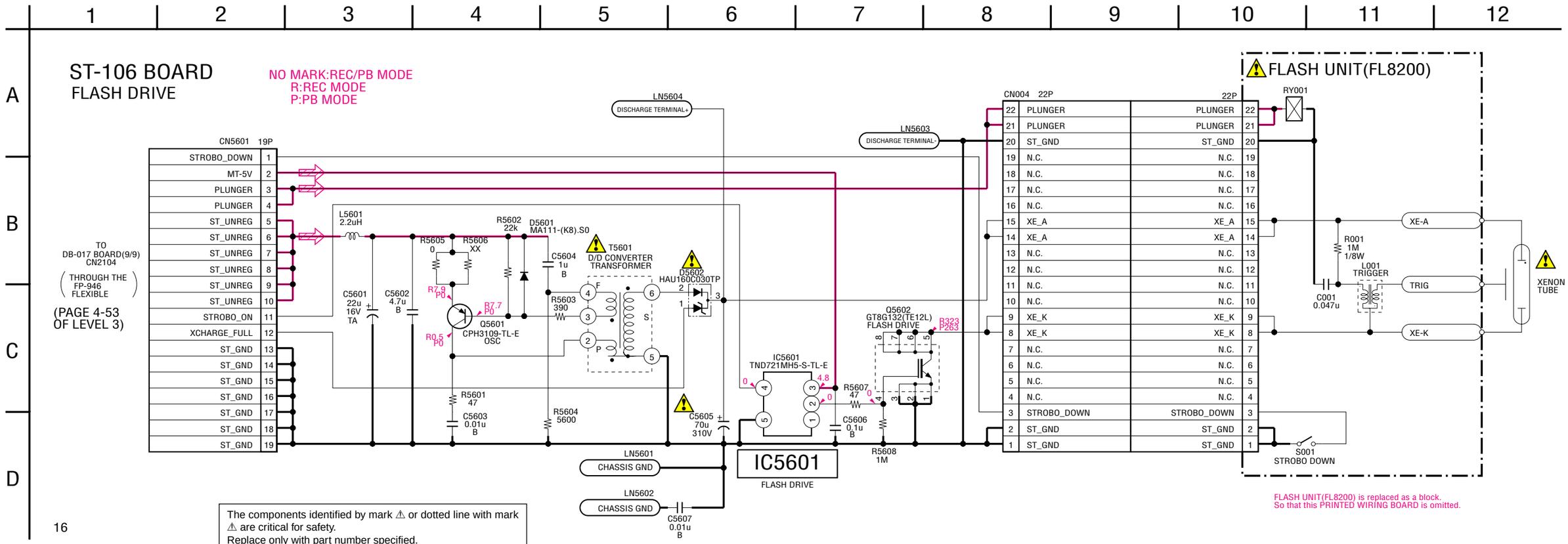
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

For Schematic Diagram

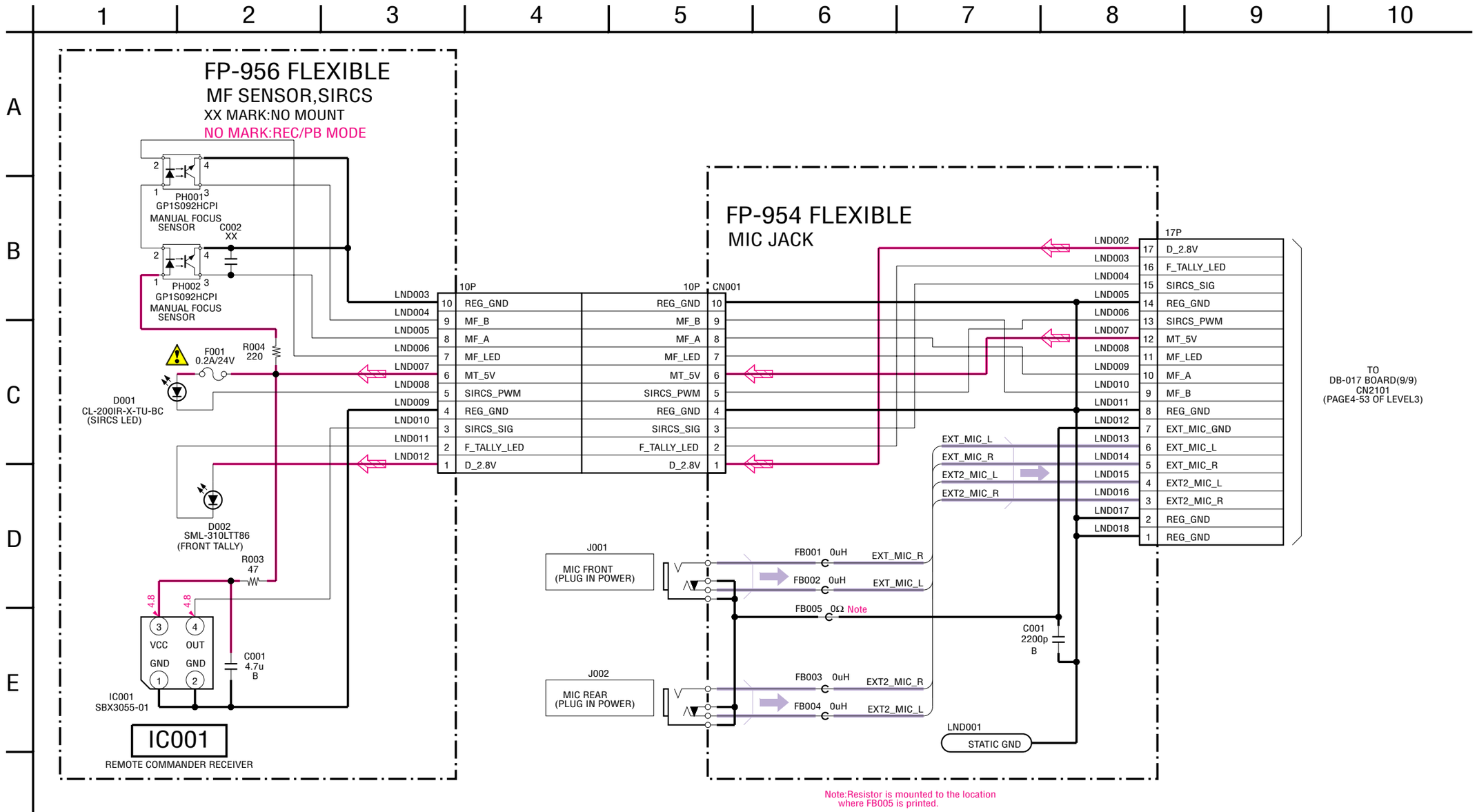
• Refer to page 4-97 for printed wiring board of ST-106.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。 従って交換時は，必ず指定の部品を使用してください。

For Schematic Diagram

• Refer to page 4-101 for printed wiring board.



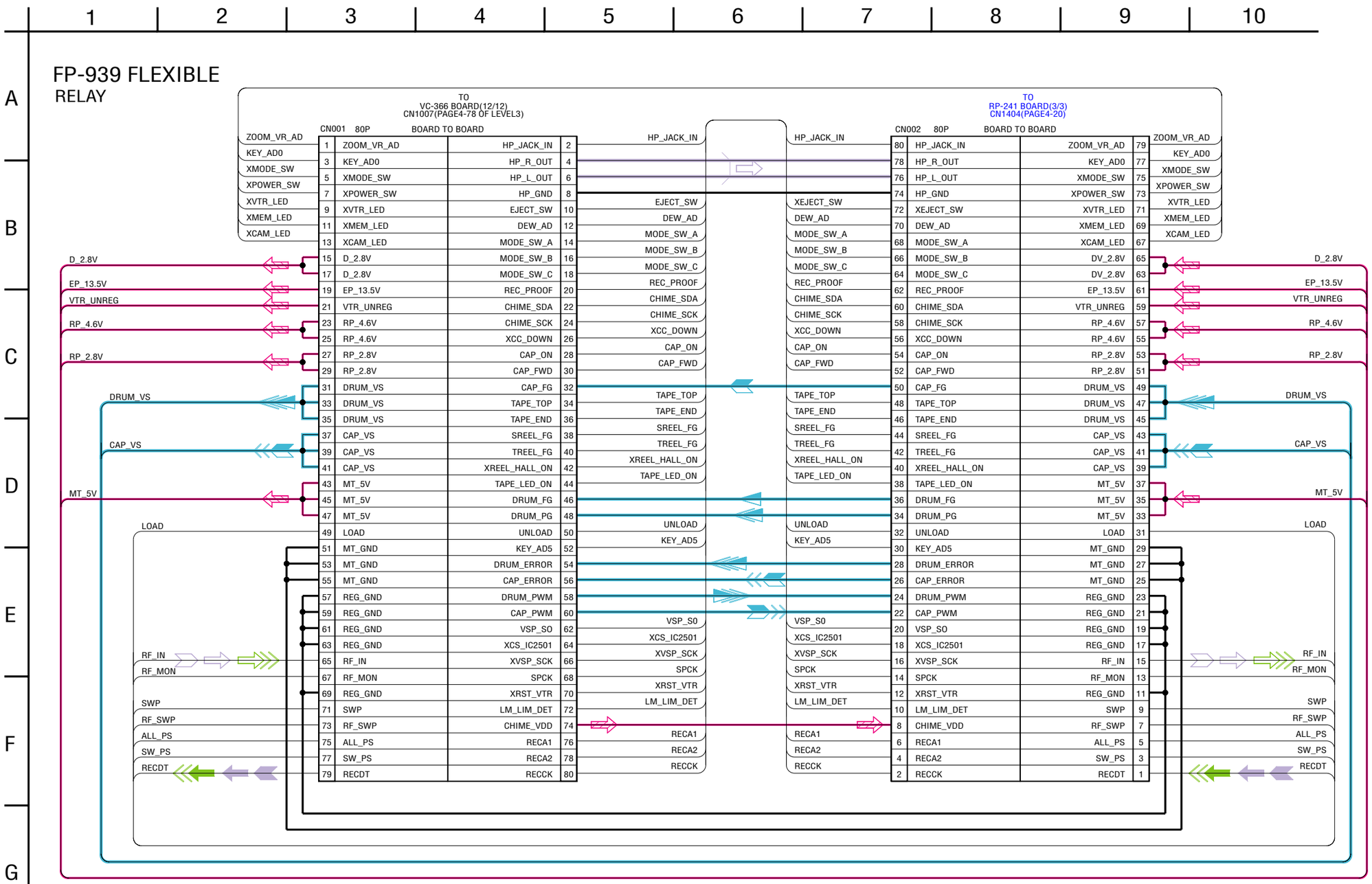
Note:Resistor is mounted to the location where FB005 is printed.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。 従って交換時は，必ず指定の部品を使用してください。

SIGNAL PATH

	AUDIO SIGNAL
REC	→
PB	

For Schematic Diagram
• Refer to page 4-81 for printed wiring board.



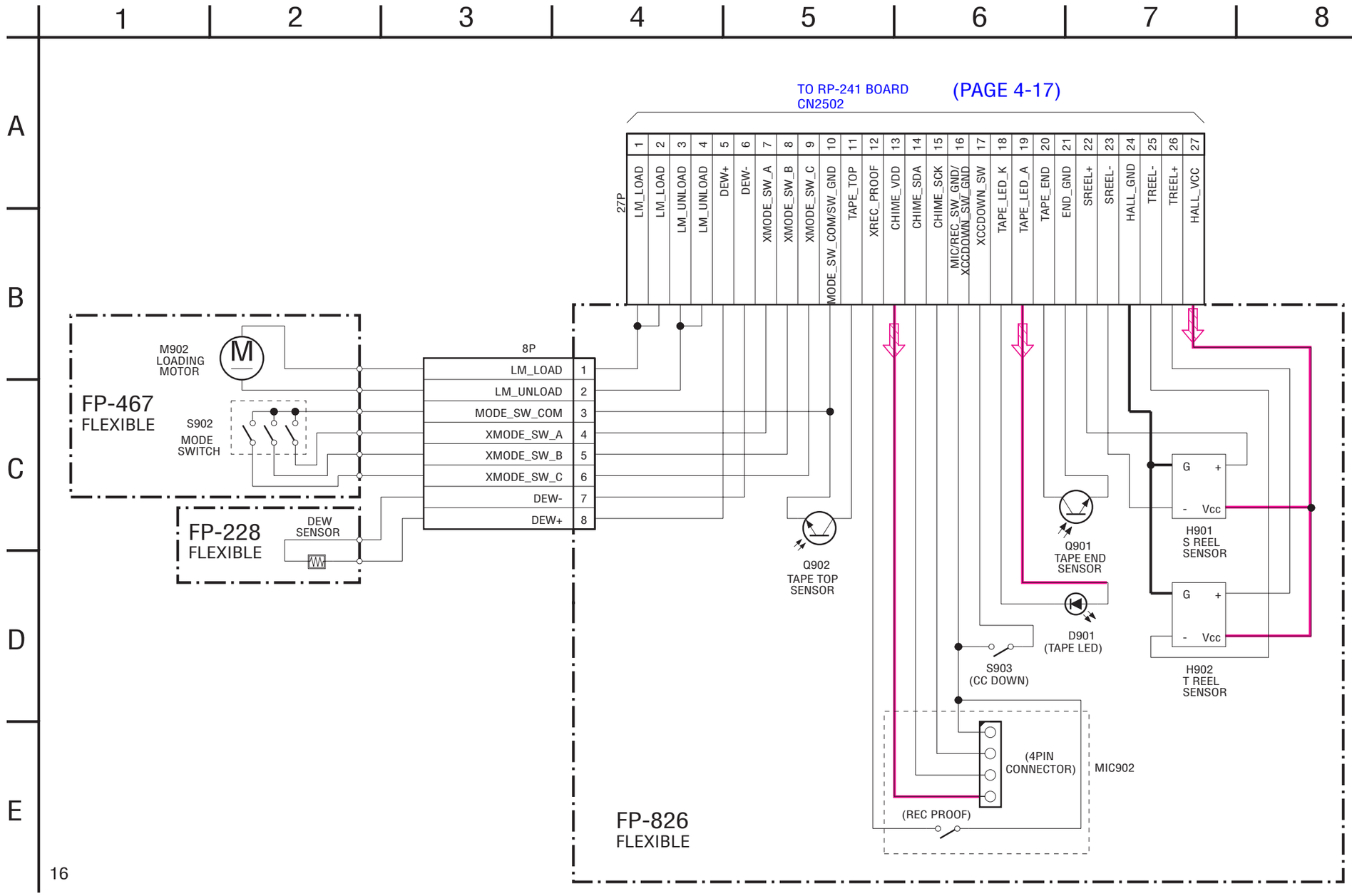
SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC				
PB				

SIGNAL PATH

	REC	REC/PB	PB
Drum speed servo			
Drum phase servo			
Drum servo (speed and phase)			
Capstan speed servo			
Capstan servo (speed and phase)			
Ref.signal			

For Schematic Diagram
• Refer to page 4-105 for printed wiring board.



Schematic diagram of the DB-017 board and VC-366 are not shown.
Pages from 4-37 to 4-78 are not shown.

4-3. PRINTED WIRING BOARDS

Link

- CD-516 BOARD
- FP-939 FLEXIBLE BOARD
- LD-163 BOARD (SIDE A)
- ST-106 BOARD
- LD-163 BOARD (SIDE B)
- FP-953 FLEXIBLE BOARD
- RP-241 BOARD
- FP-954 FLEXIBLE BOARD
- PD-221 BOARD
- FP-956 FLEXIBLE BOARD
- JK-271 BOARD
- FP-955 FLEXIBLE BOARD
- SE-149 BOARD
- FP-958 FLEXIBLE BOARD
- MS-220 BOARD
- FP-228/FP-467/FP-826 FLEXIBLE BOARD
- LB-015 BOARD

- COMMON NOTE FOR PRINTED WIRING BOARDS
- MOUNTED PARTS LOCATION
- CIRCUIT BOARDS LOCATION
- FLEXIBLE BOARDS LOCATION

NAME	*FUNCTION*
CD-516	*CCD IMAGER*
LD-163	*LENS DRIVE*
RP-241	*REC/PB RF AMP, MECHA CONTROL, CONNECTOR*
PD-221	*LCD RGB DRIVE, TIMING GENERATOR, BACK LIGHT*
JK-271	*CONNECTOR*
SE-149	*PITCH/YAW SENSOR AMP*
MS-220	*MS CONNECTOR*
LB-015	*EVF, EVF BL*
ST-106	*FLASH DRIVE*
DB-017	*VIDEO I/O, AGC, EVF DRIVE, MIC AMP, VOL CONTROL, AUDIO IN/OUT, AUDIO IN, HI CONTROL, DC/DC CONVERTER, LANC, CONNECTOR*
VC-366	*RGB-CH AGC, A/D CONVERTER, TIMING GENERATOR, LENS DRIVE, CAMERA RGB PROCESS, CAMERA PROCESS, DV/MPEG MOVIE/DIG STILL/AUDIO PROCESSOR, 64Mbit SDRAM, 128Mbt/16Mbit SDRAM, FLASH MEMORY, DV INTERFACE, DV SIGNAL/RF SIGNAL PROCESSOR, HI/DIGITAL STILL CONTROL, CAMERA CONTROL, VIDEO A/D, CONNECTOR-1, CONNECTOR-2*

4-3. PRINTED WIRING BOARDS

(ENGLISH)

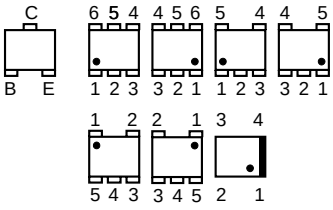
THIS NOTE IS COMMON FOR WIRING BOARDS
(In addition to this, the necessary note is printed in each block)

(For printed wiring boards)

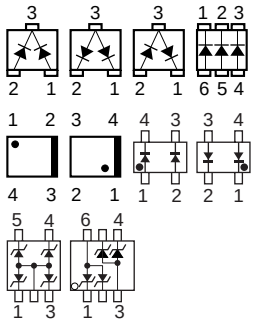
- : Uses unleaded solder.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts

Transistor



Diode



(JAPANESE)

プリント図共通ノート
（他に必要なノートは各ブロックに記載してあります）
【プリント図ノート】

- ：無鉛半田を使用しています。
- は見ている面側のパターン。
  （他のパターンについては表示されていません）
- スルーホールは省略。
- ○番号は波形図の照合番号。
- プリント図には，本機で使用していない部品が記載されている場合があります。
- はパネル表示名称。

BOARD INFORMATION

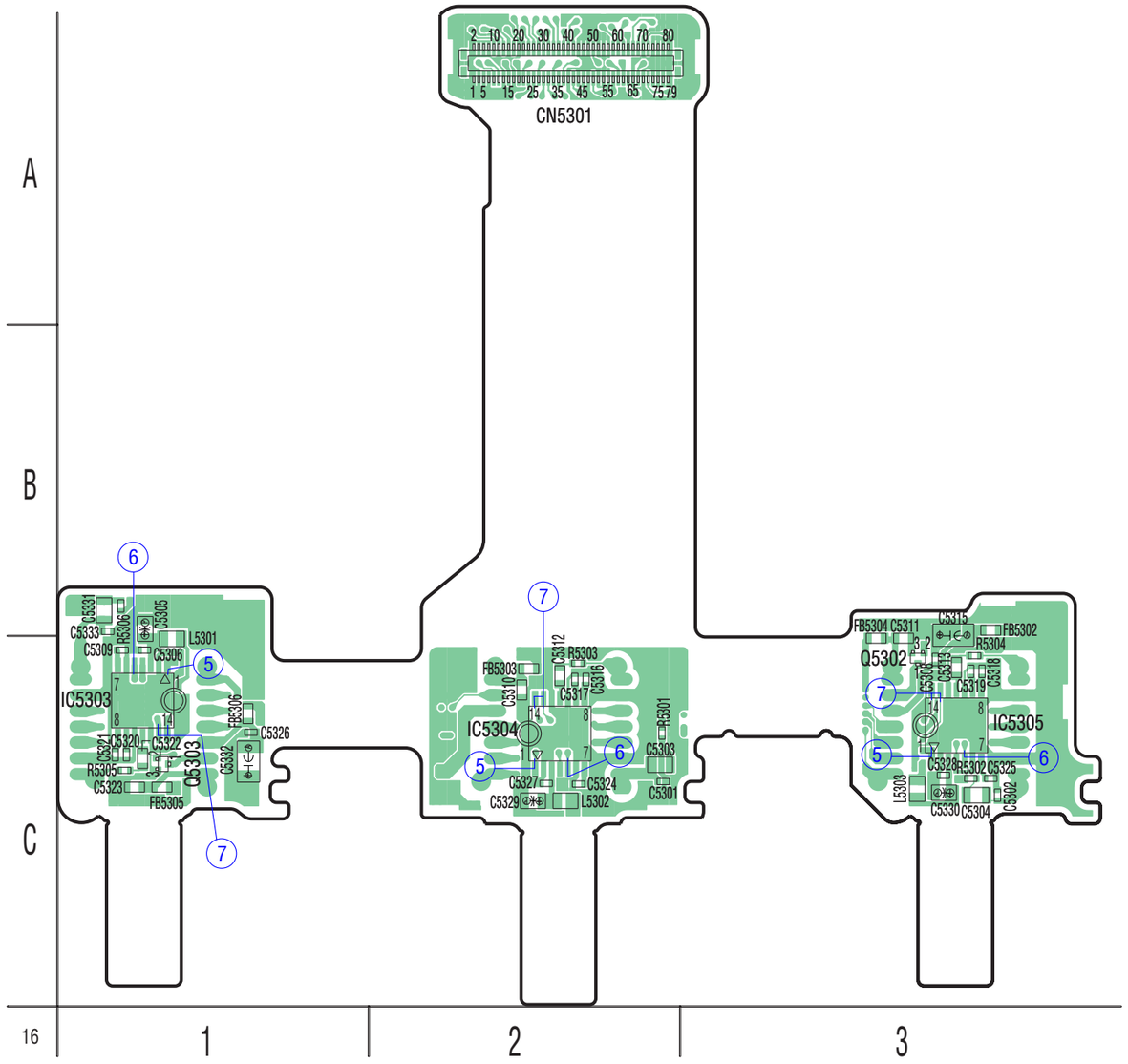
board name	parts location	pattern	
	(shown on page)	number of layers	layers not shown
CD-516	4-115	4	2 to 3
LD-163	4-115	4	2 to 3
RP-241	4-115	2	–
PD-221	4-115	2	–
JK-271	4-116	4	2 to 3
SE-149	4-116	2	–
MS-220	–	2	–
LB-015	–	2	–
FP-939	–	1	–
ST-106	4-116	2	–
FP-953	–	2	–
FP-954	–	2	–
FP-956	4-116	1	–
FP-955	–	1	–
FP-958	–	1	–
DB-017	4-117	6	2 to 5
VC-366	4-118	6	2 to 5

4-3. PRINTED WIRING BOARDS

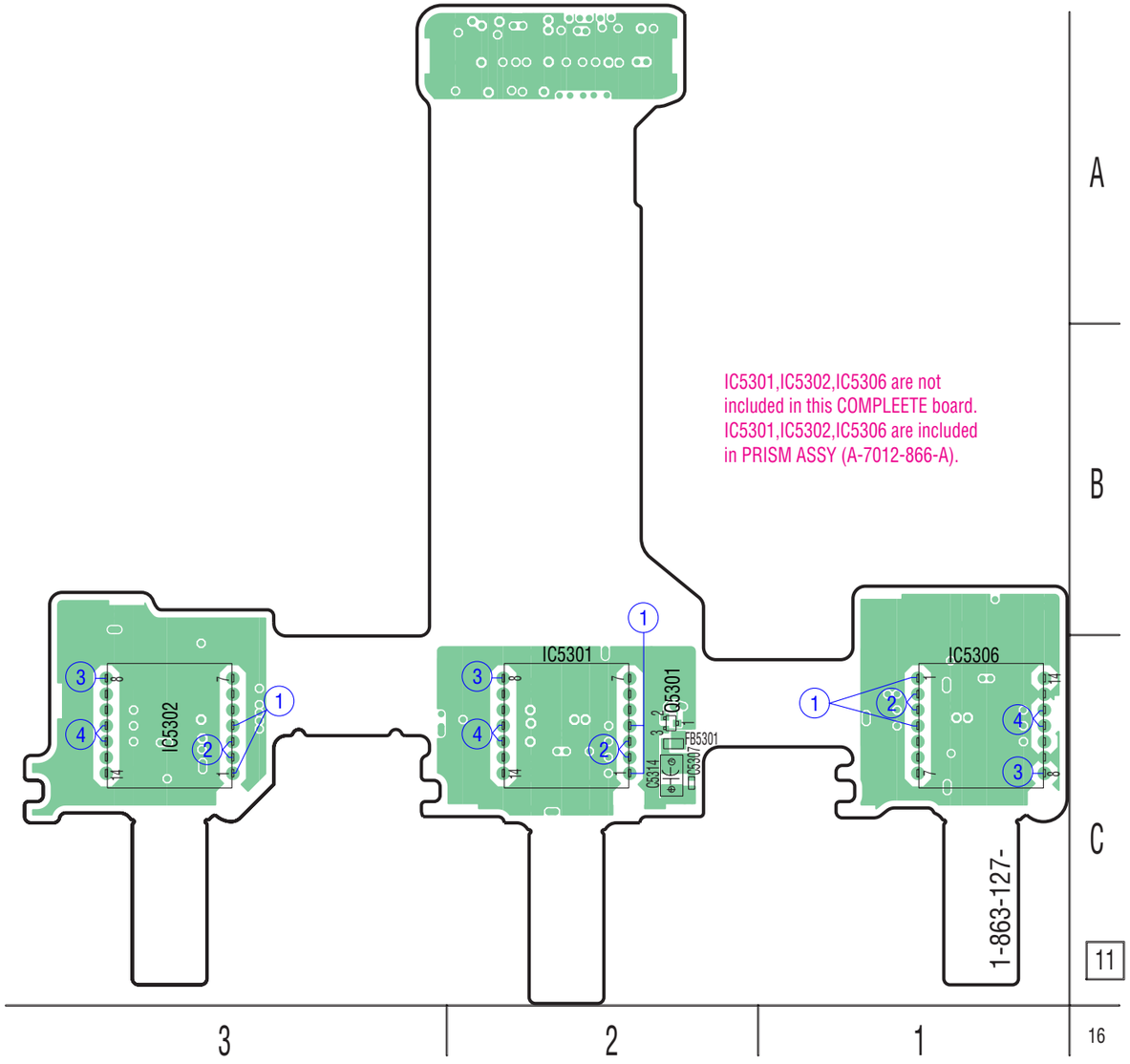
• Refer to page 4-79 for common note for printed wiring board.

• : Uses unleaded solder.

CD-516 BOARD(SIDE A)



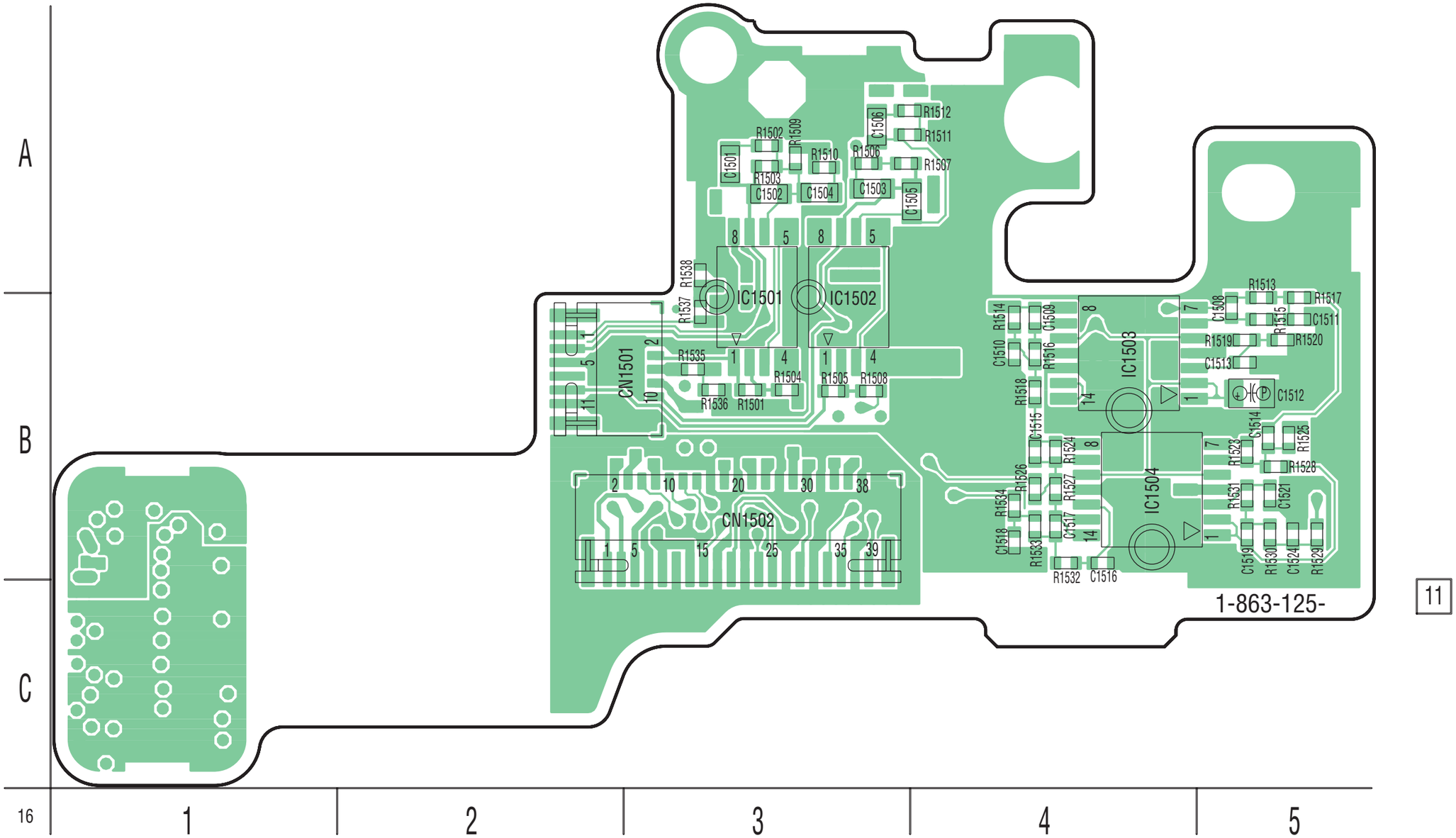
CD-516 BOARD(SIDE B)



IC5301,IC5302,IC5306 are not included in this COMPLEETE board.
IC5301,IC5302,IC5306 are included in PRISM ASSY (A-7012-866-A).

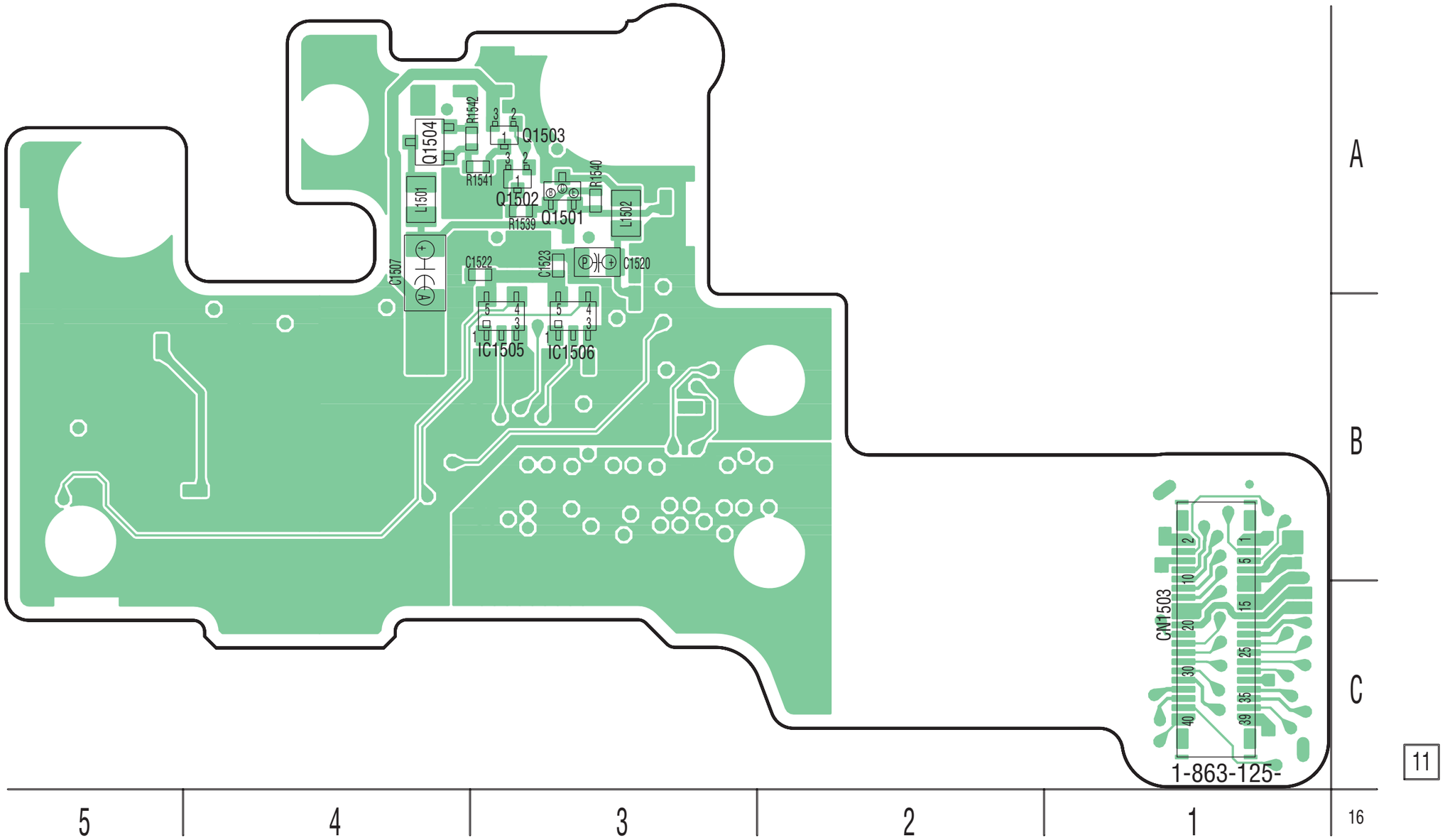
• Refer to page 4-79 for common note for printed wiring board. • : Uses unleaded solder.

LD-163 BOARD(SIDE A)



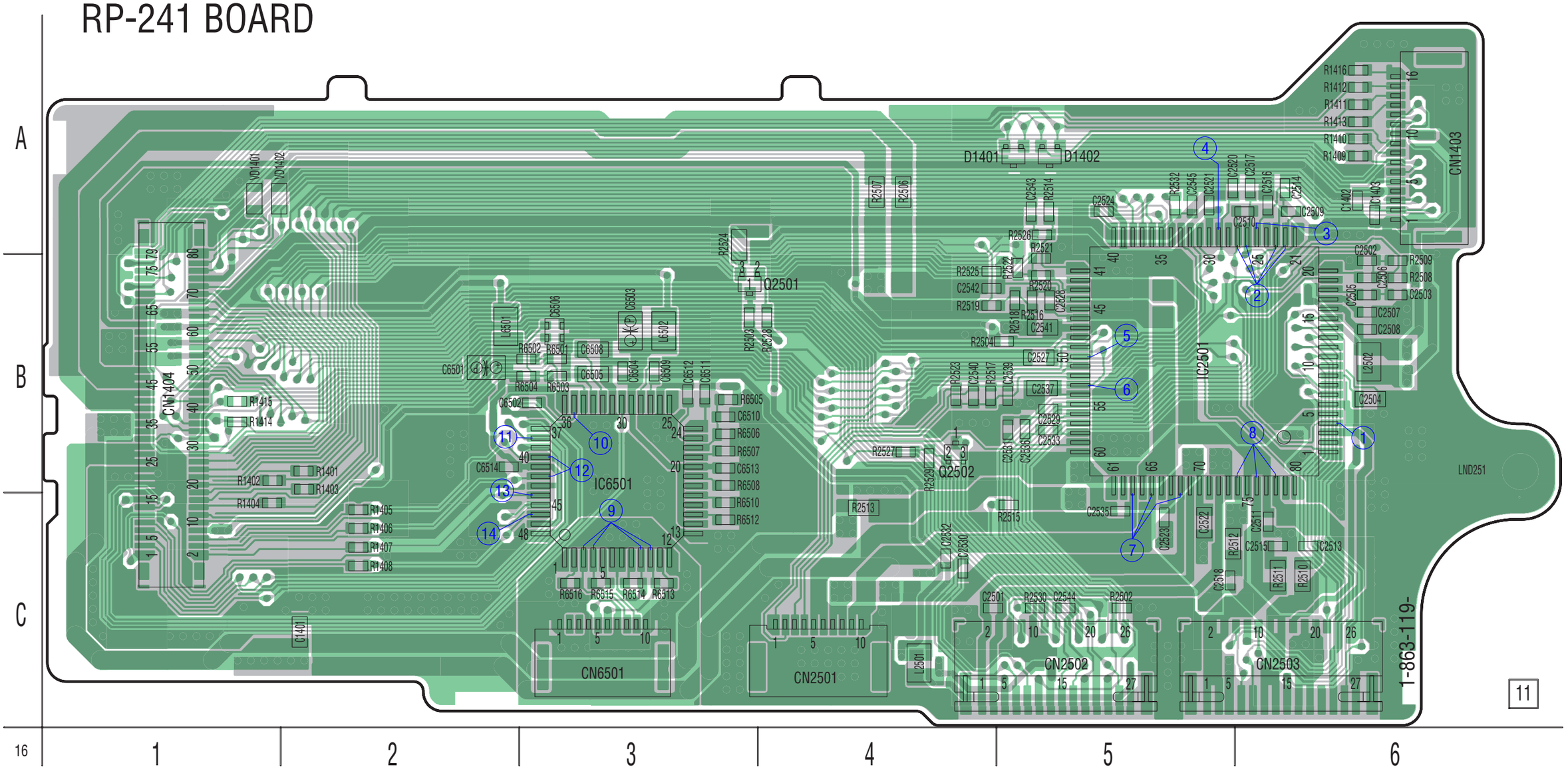
• Refer to page 4-79 for common note for printed wiring board. • 4F : Uses unleaded solder.

LD-163 BOARD(SIDE B)



• Refer to page 4-79 for common note for printed wiring board. • : Uses unleaded solder.

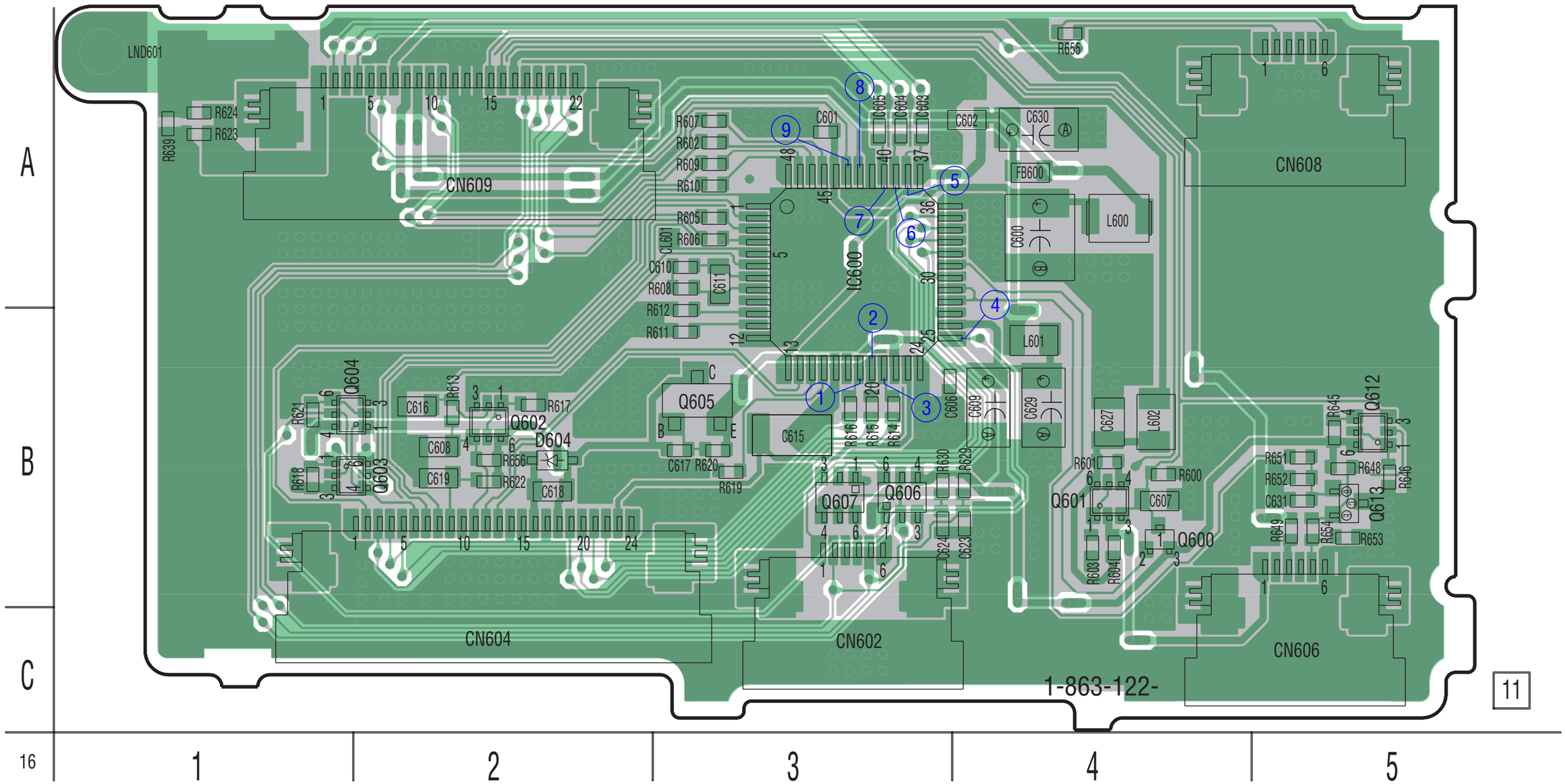
RP-241 BOARD



• Refer to page 4-79 for common note for printed wiring board.

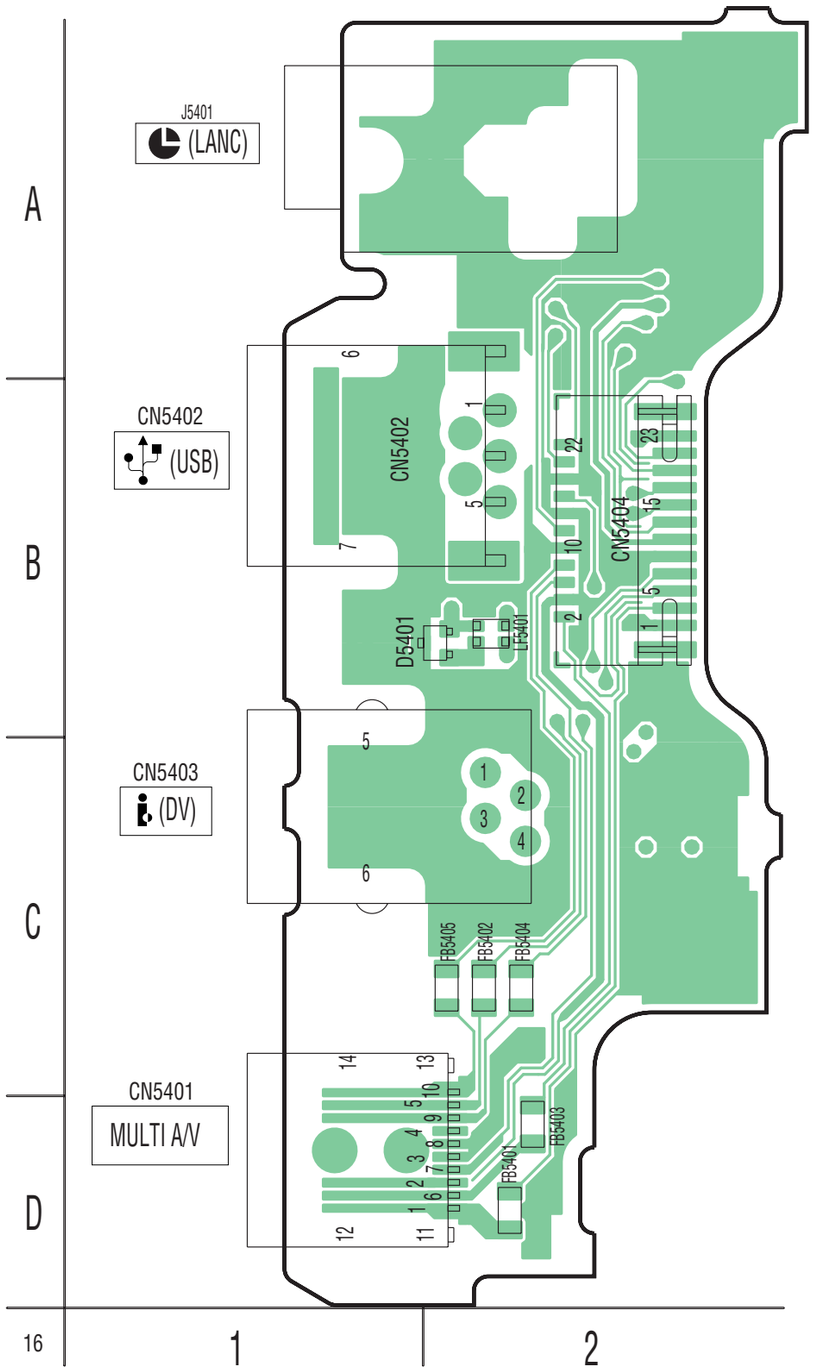
• : Uses unleaded solder.

PD-221 BOARD

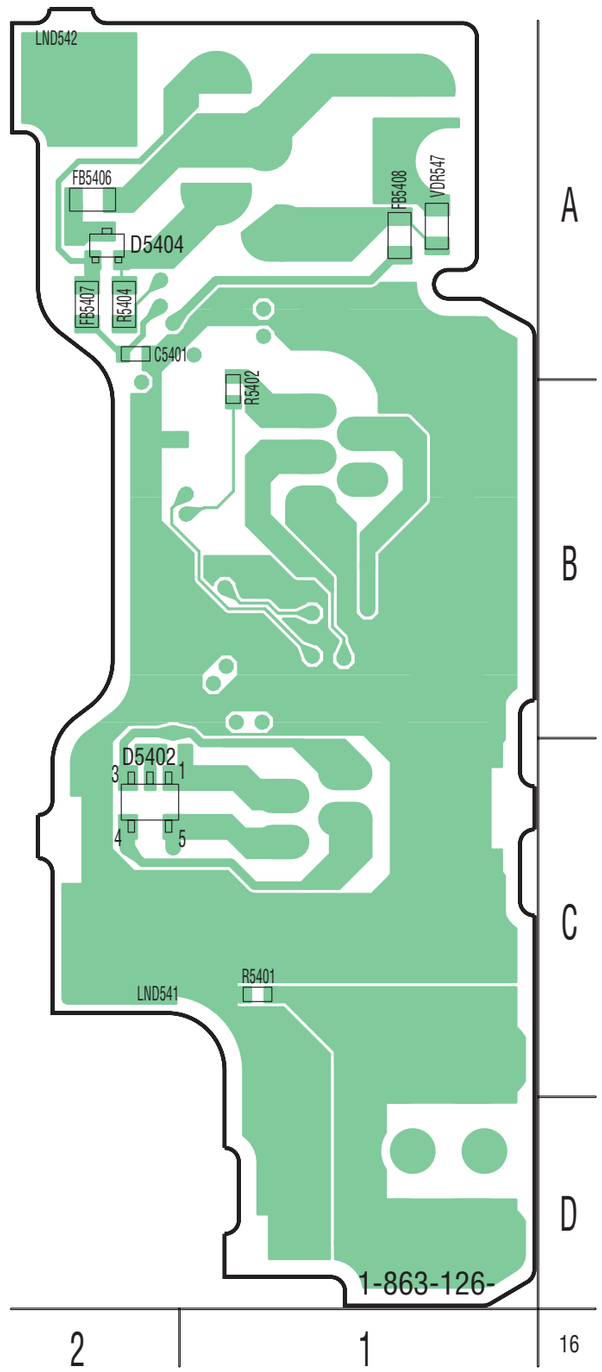


• Refer to page 4-79 for common note for printed wiring board. • : Uses unleaded solder.

JK-271 BOARD(SIDE A)

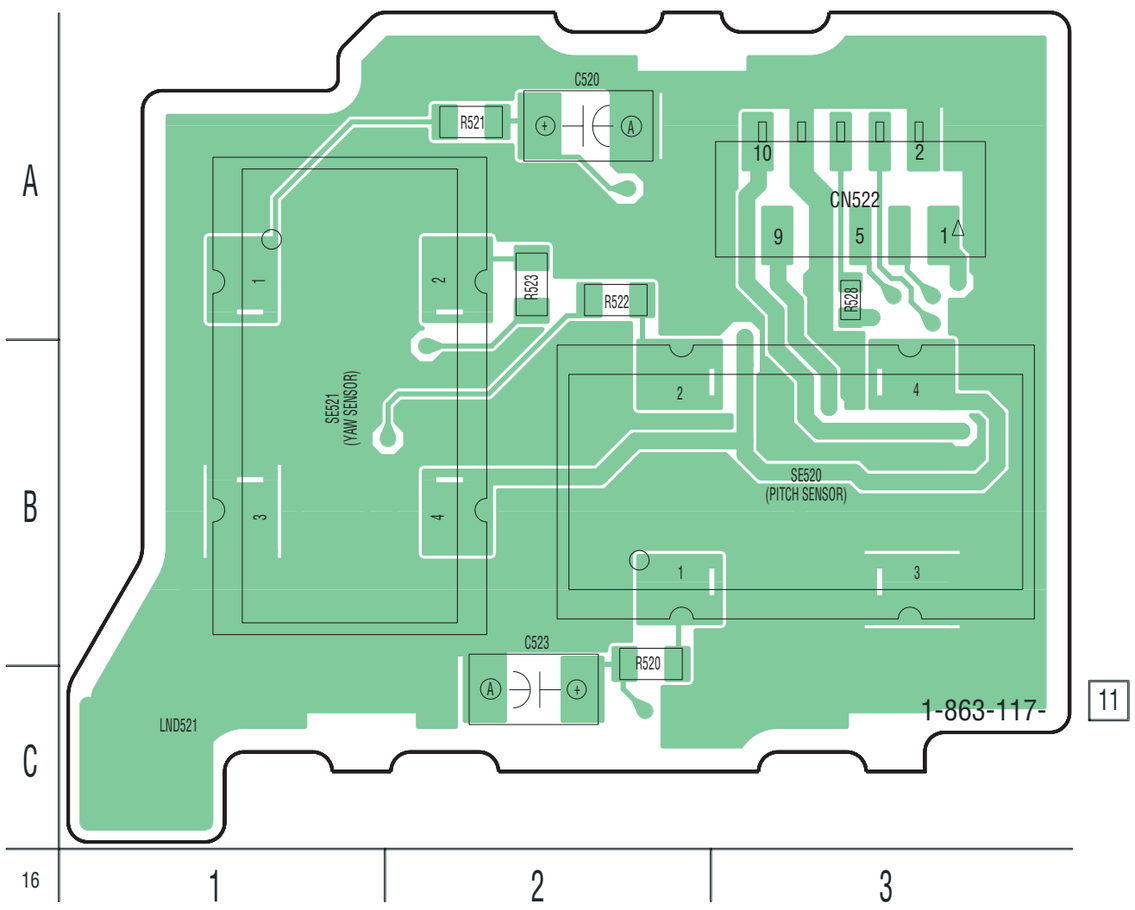


JK-271 BOARD(SIDE B)

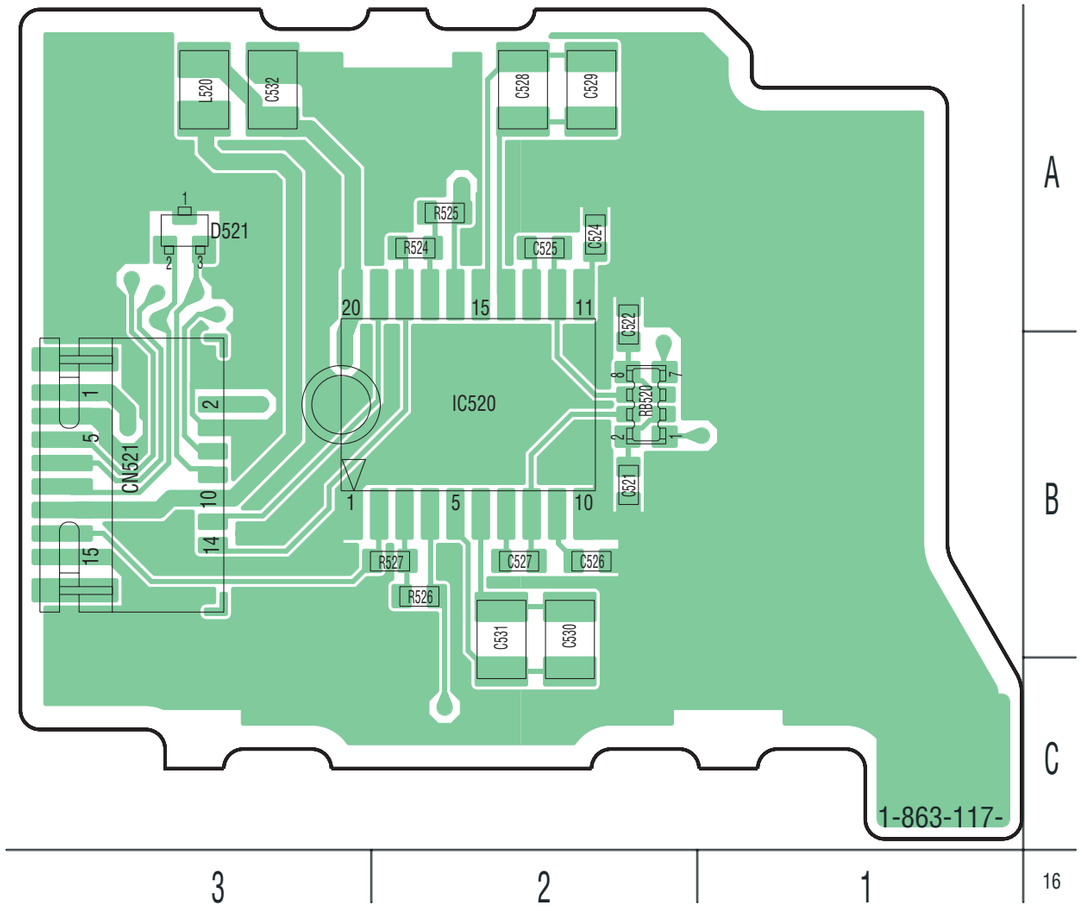


• Refer to page 4-79 for common note for printed wiring board. • : Uses unleaded solder.

SE-149 BOARD(SIDE A)



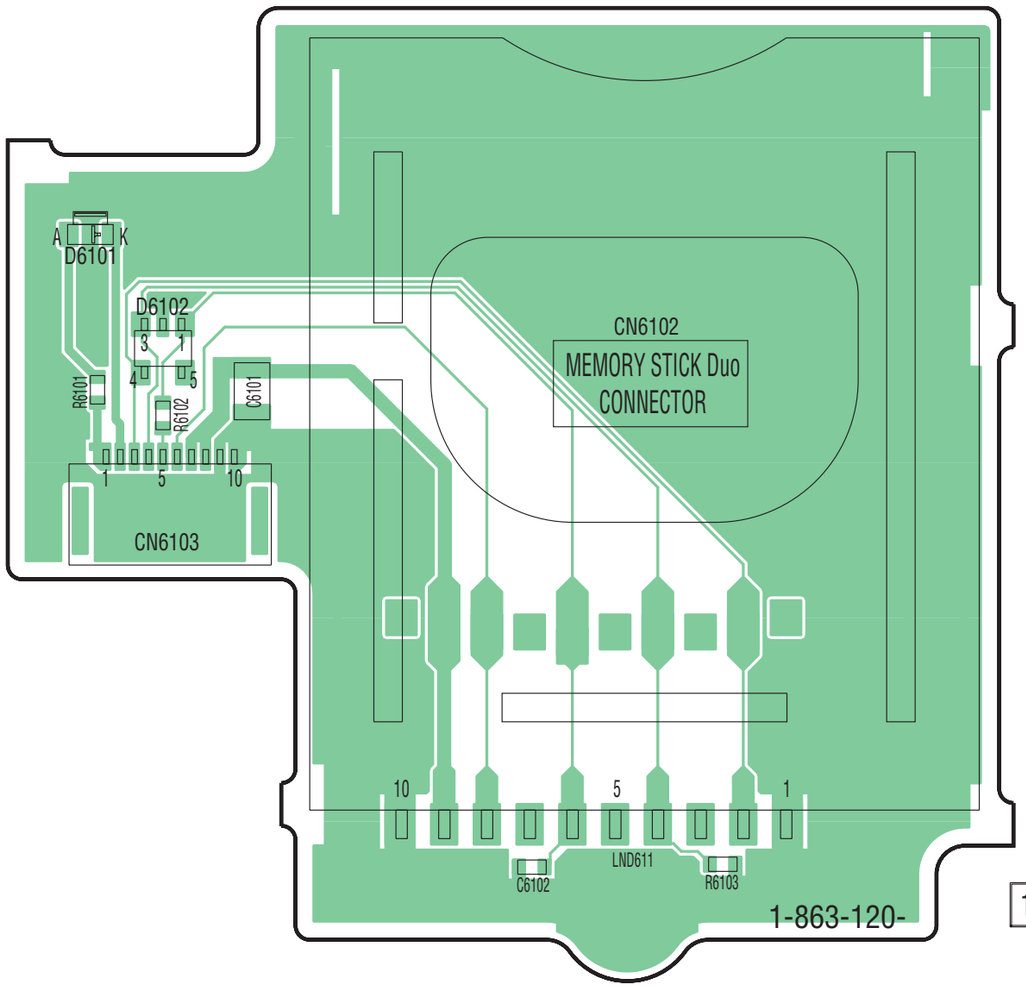
SE-149 BOARD(SIDE B)



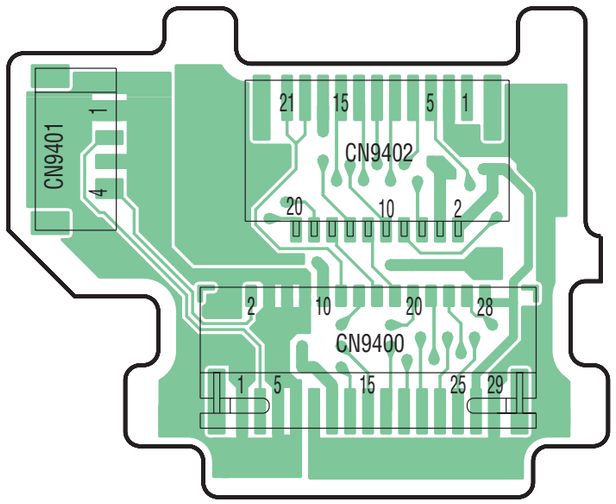
• Refer to page 4-79 for common note for printed wiring board.

• : Uses unleaded solder.

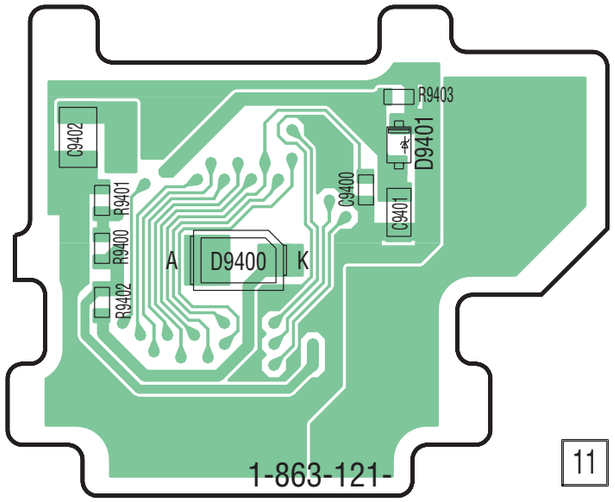
MS-220 BOARD



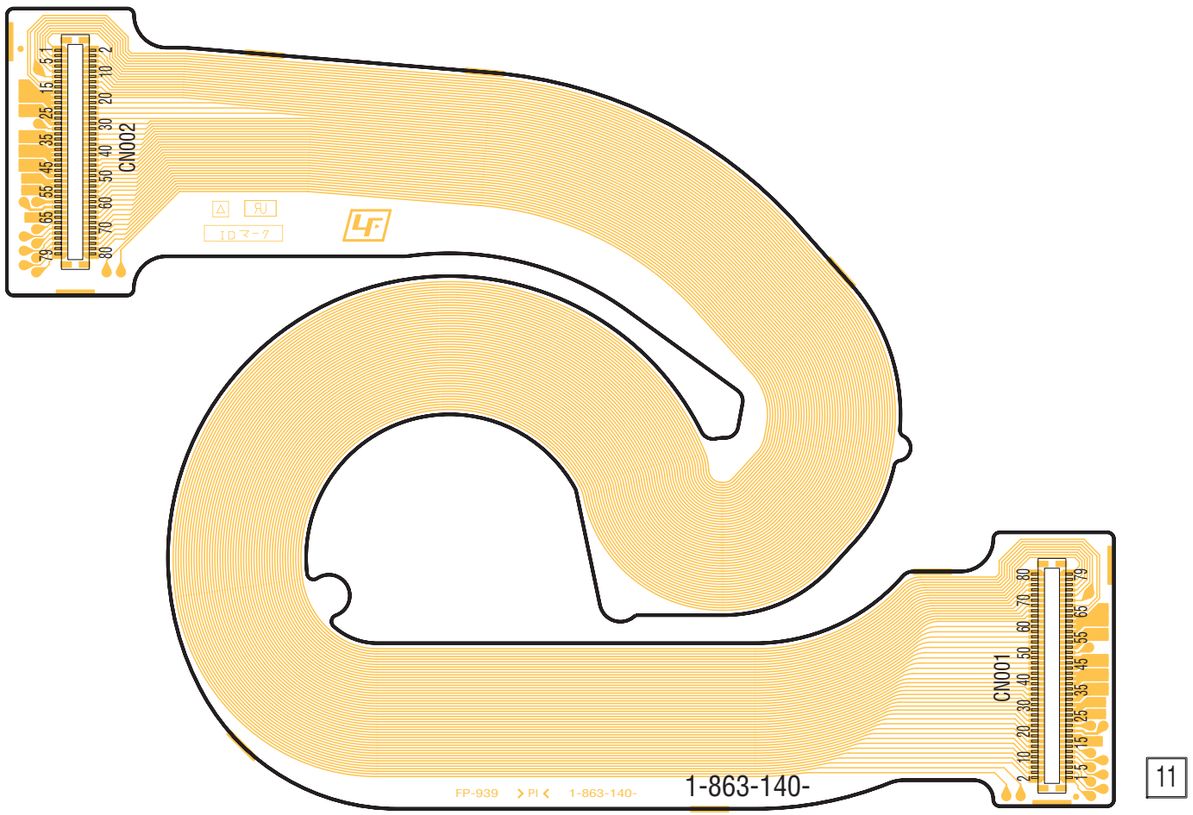
LB-015 BOARD(SIDE A)



LB-015 BOARD(SIDE B)

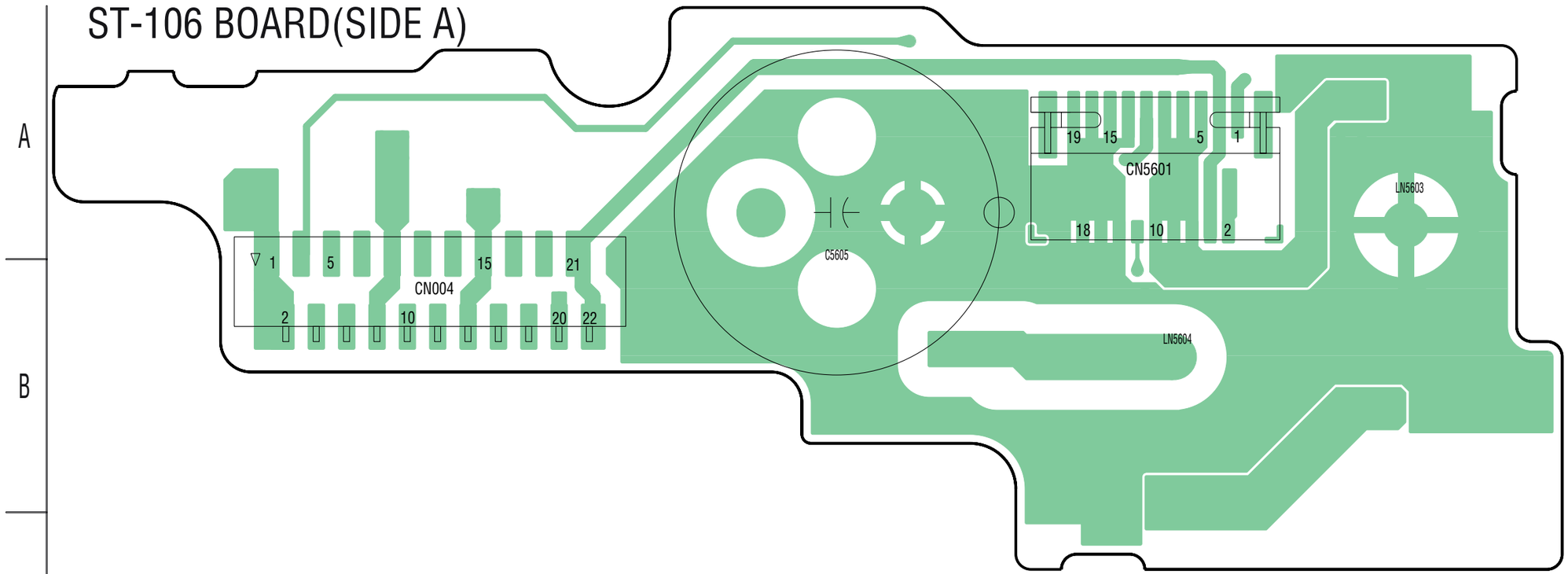


FP-939 FLEXIBLE BOARD

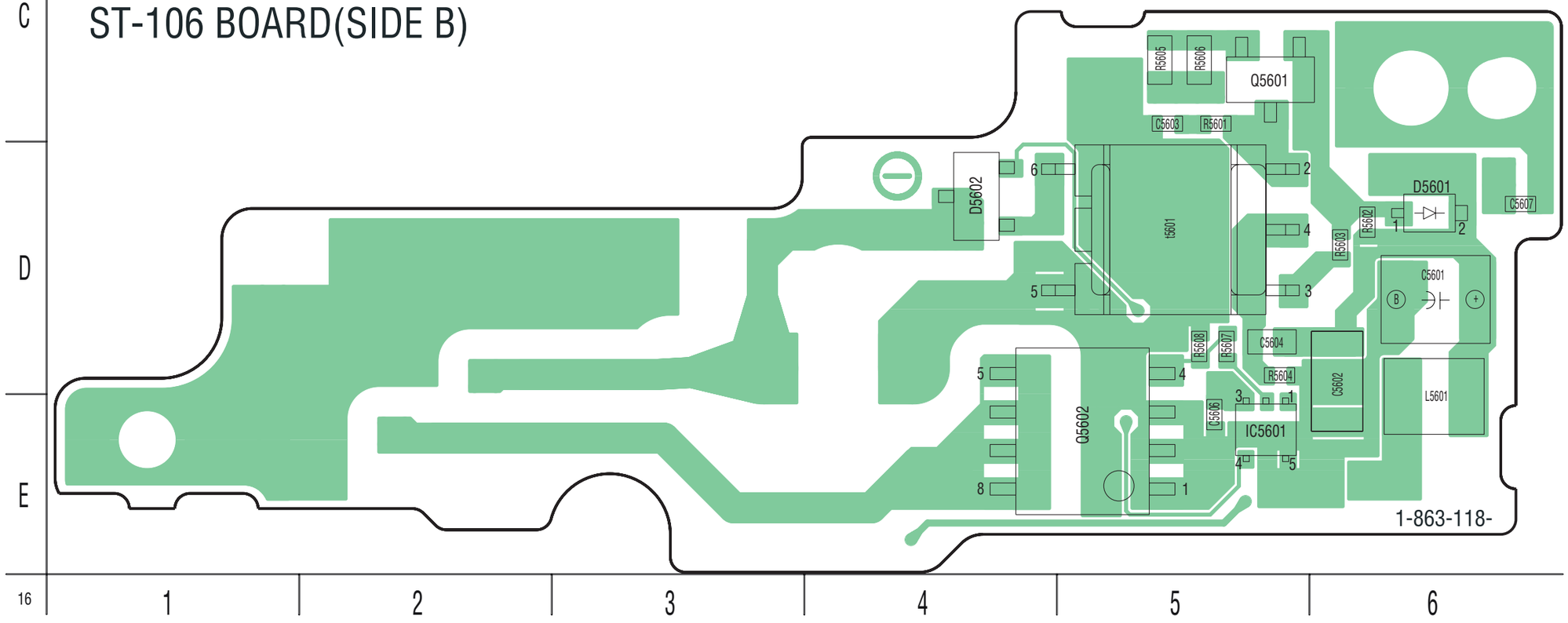


• Refer to page 4-79 for common note for printed wiring board. • 4F : Uses unleaded solder.

ST-106 BOARD(SIDE A)



ST-106 BOARD(SIDE B)

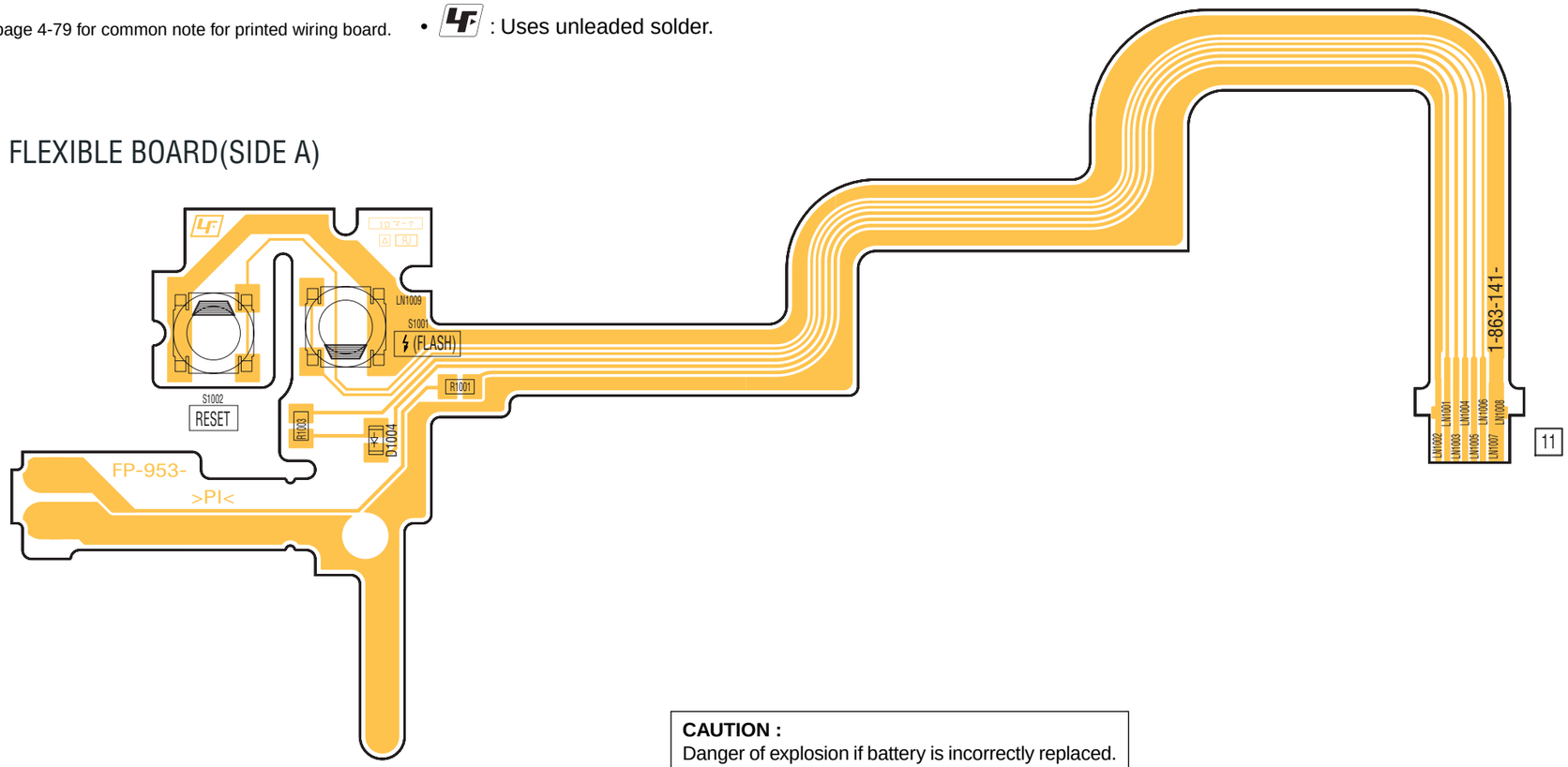


11

• Refer to page 4-79 for common note for printed wiring board.

• : Uses unleaded solder.

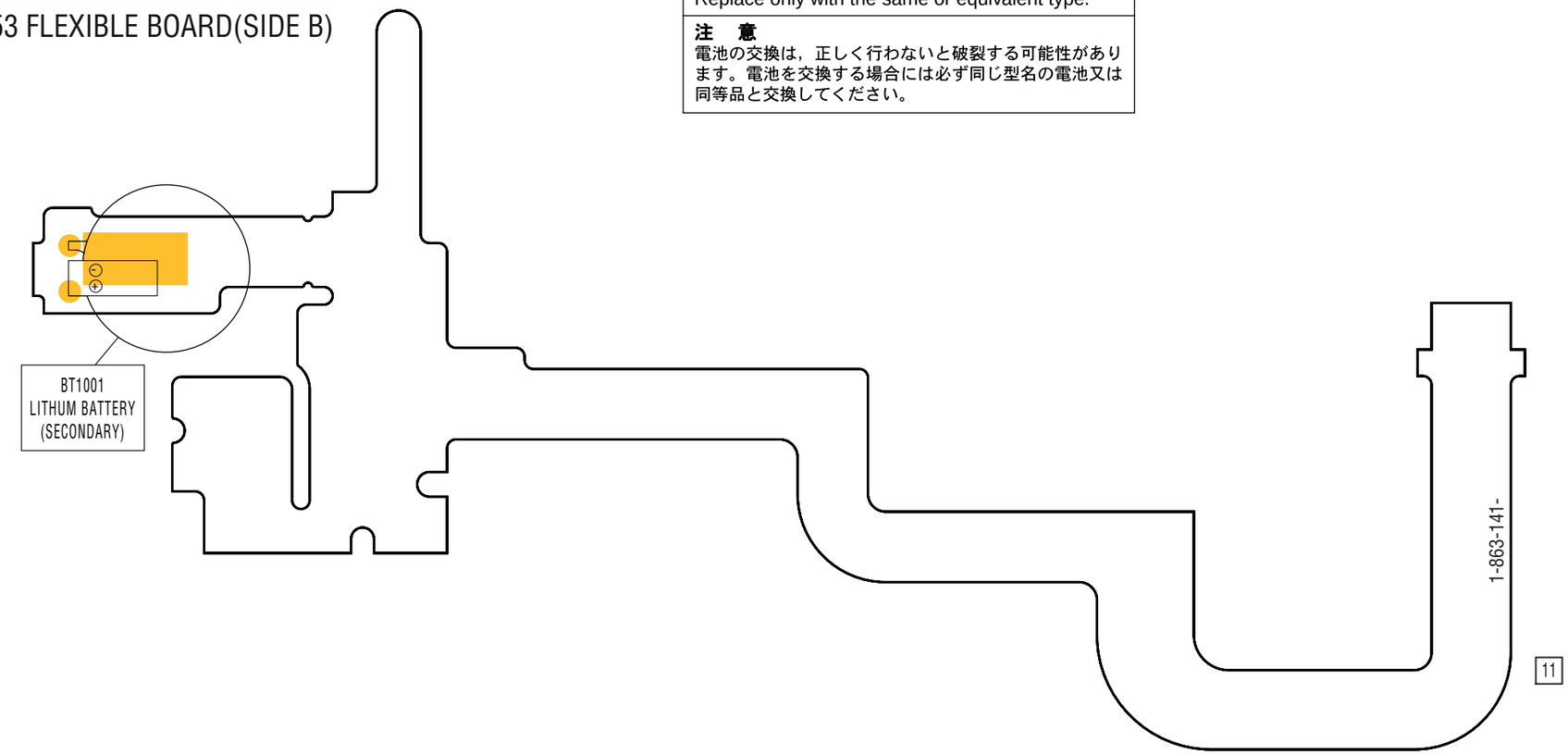
FP-953 FLEXIBLE BOARD(SIDE A)



CAUTION :
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

注　意
電池の交換は，正しく行わないと破裂する可能性があります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

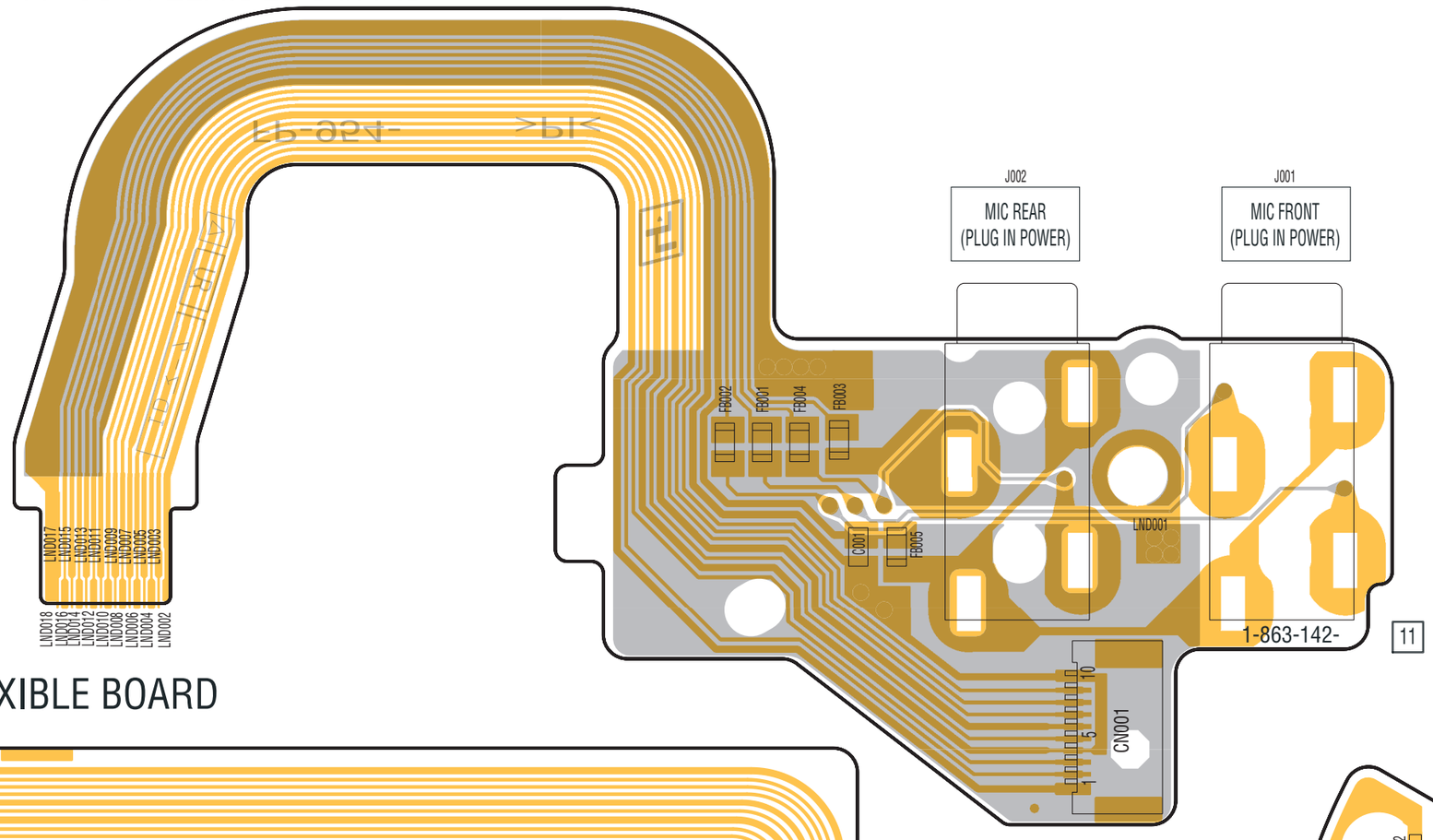
FP-953 FLEXIBLE BOARD(SIDE B)



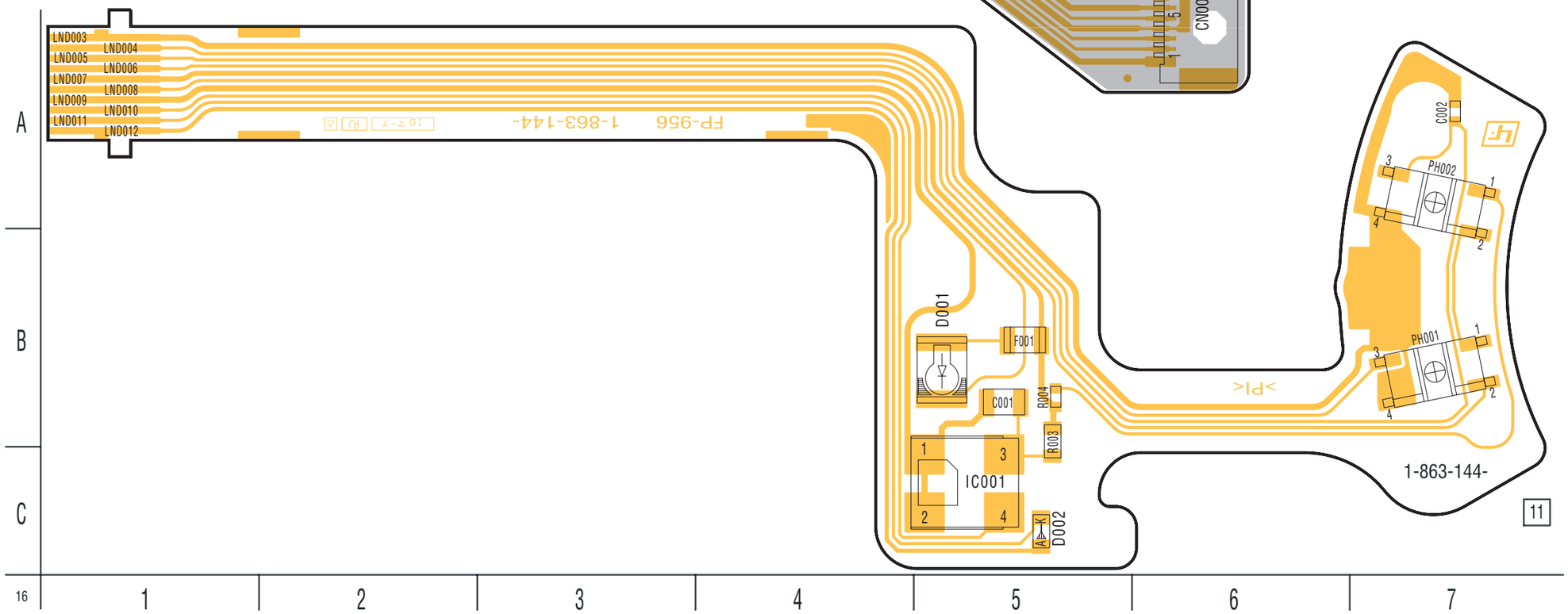
• Refer to page 4-79 for common note for printed wiring board.

• : Uses unleaded solder.

FP-954 FLEXIBLE BOARD

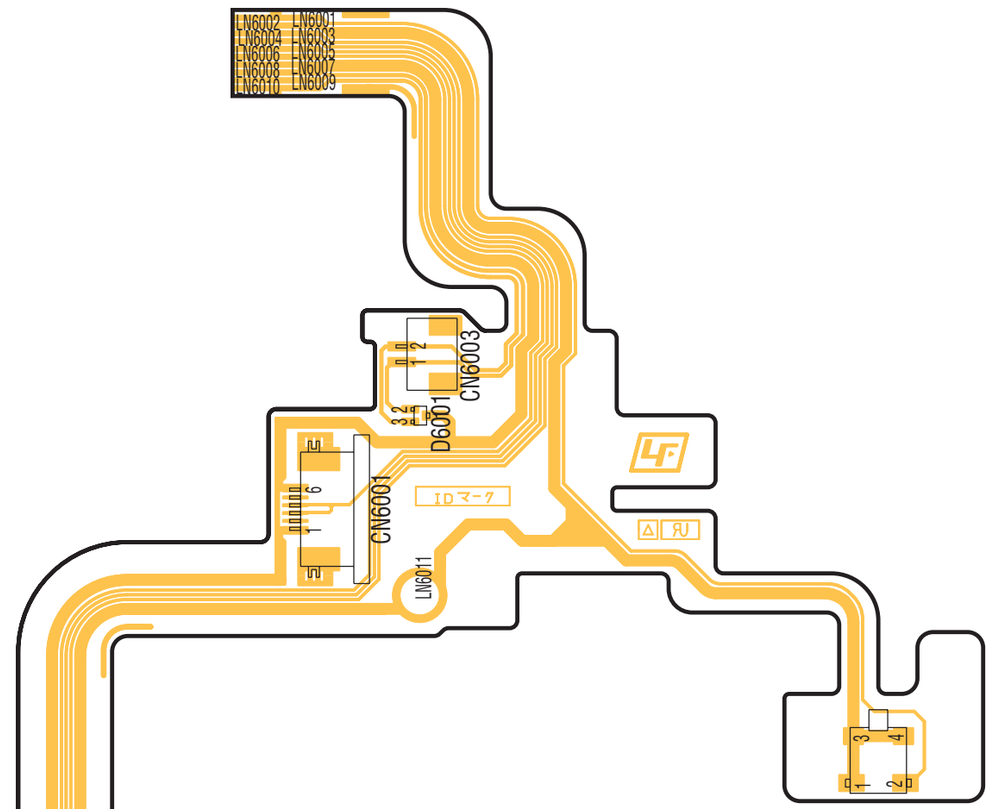


FP-956 FLEXIBLE BOARD



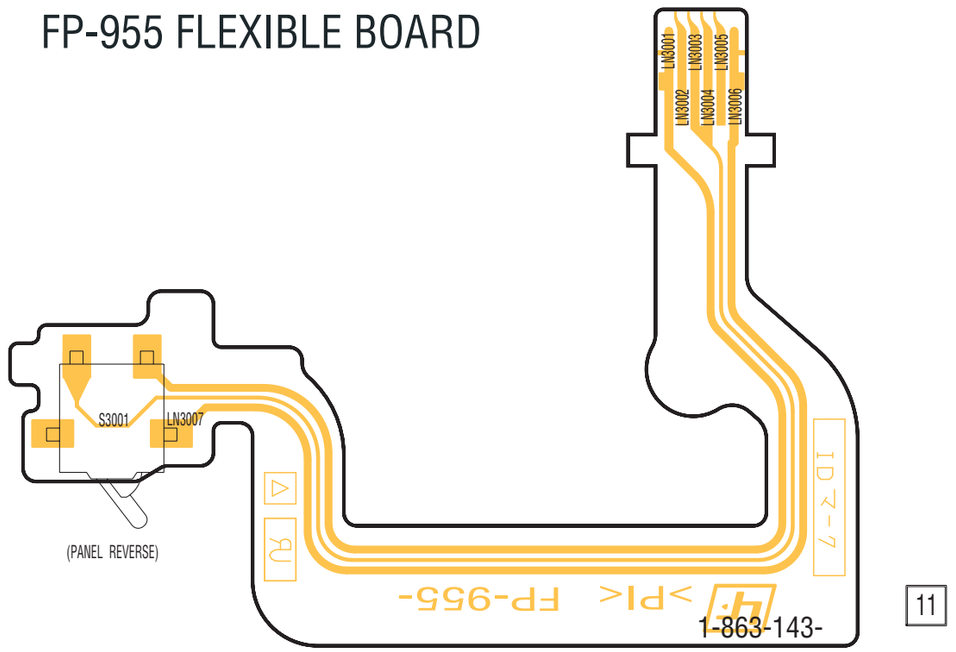
• Refer to page 4-79 for common note for printed wiring board. • : Uses unleaded solder.

FP-958 FLEXIBLE BOARD



11

FP-955 FLEXIBLE BOARD

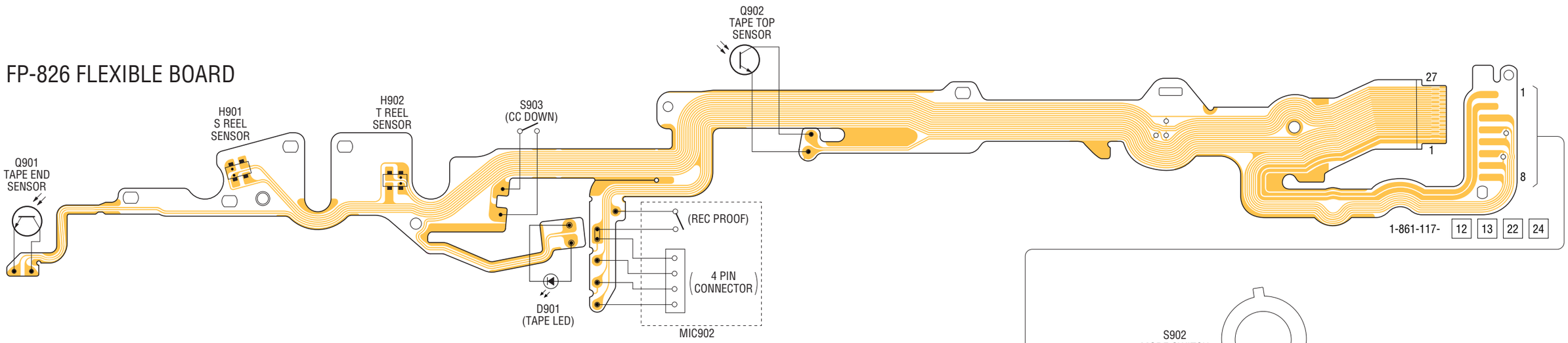


11

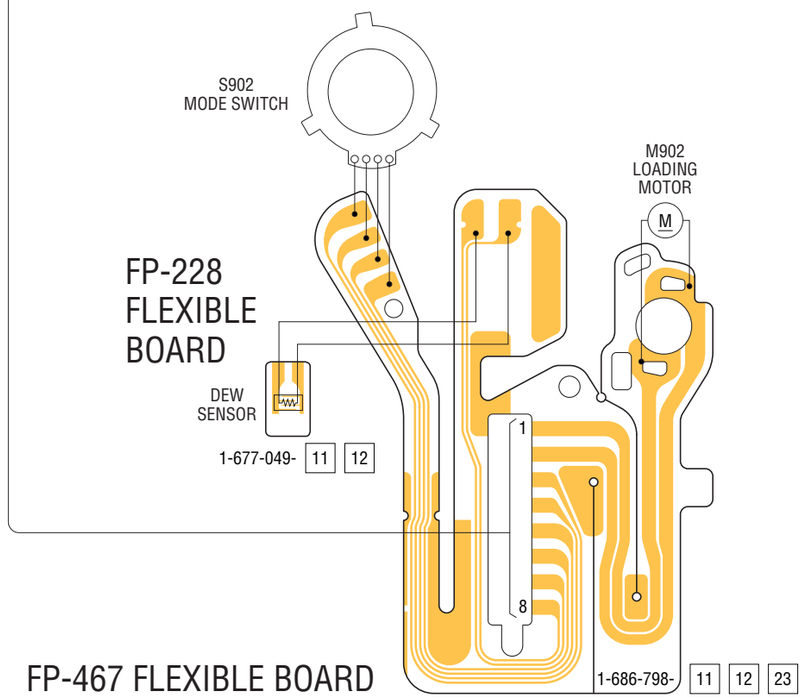
• Refer to page 4-79 for common note for printed wiring board.

• : Uses unleaded solder.

FP-826 FLEXIBLE BOARD



FP-228 FLEXIBLE BOARD



FP-467 FLEXIBLE BOARD

Printed wiring board of the DB-017 board and VC-366 board are not shown.
Pages from 4-107 to 4-114 are not shown.

4-4. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

CD-516 BOARD

	C5301	C-2
	C5302	C-3
	C5303	C-2
	C5304	C-3
	C5305	B-1
	C5306	C-1
*	C5307	C-2
	C5308	C-3
	C5309	C-1
	C5310	C-2
	C5311	B-3
	C5312	C-2
	C5313	C-3
*	C5314	C-2
	C5315	B-3
	C5316	C-2
	C5317	C-2
	C5318	C-3
	C5319	C-3
	C5320	C-1
	C5321	C-1
	C5322	C-1
	C5323	C-1
	C5324	C-2
	C5325	C-3
	C5326	C-1
	C5327	C-2
	C5328	C-3
	C5329	C-2
	C5330	C-3
	C5331	B-1
	C5332	C-1
	C5333	B-1
	CN5301	A-2
*	FB5301	C-2
	FB5302	B-3
	FB5303	C-2
	FB5304	B-3
	FB5305	C-1
	FB5306	C-1
*	IC5301	C-2
*	IC5302	C-3
	IC5303	C-1
	IC5304	C-2
	IC5305	C-3
*	IC5306	C-1
	L5301	C-1
	L5302	C-2
	L5303	C-3
*	Q5301	C-2
	Q5302	C-3
	Q5303	C-1
	R5301	C-2
	R5302	C-3
	R5303	C-2
	R5304	C-3
	R5305	C-1
	R5306	B-1

LD-163 BOARD

	C1501	A-3
	C1502	A-3
	C1503	A-3
	C1504	A-3
	C1505	A-4
	C1506	A-3
*	C1507	A-4
	C1508	B-5
	C1509	B-4
	C1510	B-4
	C1511	B-5
	C1512	B-5
	C1513	B-5
	C1514	B-5
	C1515	B-4
	C1516	B-4
	C1517	B-4
	C1518	B-4
	C1519	B-5
*	C1520	A-3
	C1521	B-5
*	C1522	A-3
*	C1523	A-3
	C1524	B-5
	CN1501	B-3
	CN1502	B-3
*	CN1503	C-1
	IC1501	B-3
	IC1502	B-3
	IC1503	B-4
	IC1504	B-4
*	IC1505	B-3
*	IC1506	B-3
*	L1501	A-4
*	L1502	A-3
*	Q1501	A-3
*	Q1502	A-3
*	Q1503	A-3
*	Q1504	A-4
	R1501	B-3
	R1502	A-3
	R1503	A-3
	R1504	B-3
	R1505	B-3
	R1506	A-3
	R1507	A-4
	R1508	B-3
	R1509	A-3
	R1510	A-3
	R1511	A-4
	R1512	A-4
	R1513	A-5
	R1514	B-4
	R1515	B-5
	R1516	B-4
	R1517	B-5
	R1518	B-4
	R1519	B-5
	R1520	B-5
	R1523	B-5
	R1524	B-4
	R1525	B-5
	R1526	B-4
	R1527	B-4
	R1528	B-5
	R1529	B-5
	R1530	B-5
	R1531	B-5
	R1532	B-4
	R1533	B-4
	R1534	B-4
	R1535	B-3
	R1536	B-3
	R1537	B-3
	R1538	A-3
*	R1539	A-3
*	R1540	A-3
*	R1541	A-3
*	R1542	A-3

RP-241 BOARD

	C1401	C-2
	C1402	A-6
	C1403	A-6
	C2501	C-4
	C2502	A-6
	C2503	B-6
	C2504	B-6
	C2505	B-6
	C2506	B-6
	C2507	B-6
	C2508	B-6
	C2509	A-6
	C2510	A-6
	C2511	C-6
	C2513	C-6
	C2514	A-6
	C2515	C-6
	C2516	A-6
	C2517	A-6
	C2518	C-5
	C2520	A-5
	C2521	A-5
	C2522	C-5
	C2523	C-5
	C2524	A-5
	C2527	B-5
	C2528	B-5
	C2529	B-5
	C2530	C-4
	C2531	B-5
	C2532	C-4
	C2533	B-5
	C2535	C-5
	C2536	B-5
	C2537	B-5
	C2539	B-5
	C2540	B-4
	C2541	B-5
	C2542	B-4
	C2543	A-5
	C2544	C-5
	C2545	A-5
	C6501	B-2
	C6502	B-2
	C6503	B-3
	C6504	B-3
	C6505	B-3
	C6506	B-3
	C6508	B-3
	C6509	B-3
	C6510	B-3
	C6511	B-3
	C6512	B-3
	C6513	B-3
	C6514	B-2
	CN1403	A-6
	CN1404	B-1
	CN2501	C-4
	CN2502	C-5
	CN2503	C-6
	CN6501	C-3
	D1401	A-4
	D1402	A-5
	IC2501	B-5
	IC6501	B-3
	L2501	C-4
	L2502	B-6
	L6501	B-2
	L6502	B-3
	LND251	B-6
	Q2501	B-4
	Q2502	B-4
	R1401	B-2
	R1402	B-1
	R1403	B-2
	R1404	C-1
	R1405	C-2
	R1406	C-2
	R1407	C-2
	R1408	C-2
	R1409	A-6
	R1410	A-6
	R1411	A-6
	R1412	A-6
	R1413	A-6
	R1414	B-1
	R1415	B-1
	R1416	A-6
	R2502	C-5
	R2503	B-3
	R2504	B-4
	R2506	A-4
	R2507	A-4
	R2508	B-6
	R2509	B-6
	R2510	C-6
	R2511	C-6
	R2512	C-5
	R2513	C-4
	R2514	A-5
	R2515	C-5
	R2516	B-5
	R2517	B-4
	R2518	B-5
	R2519	B-4
	R2520	B-5
	R2521	A-5
	R2522	B-5
	R2523	B-4
	R2524	A-3
	R2525	B-4
	R2526	A-5
	R2527	B-4
	R2528	B-4
	R2529	B-4
	R2530	C-5
	R2532	A-5
	R6501	B-3
	R6502	B-3
	R6503	B-3
	R6504	B-3
	R6505	B-3
	R6506	B-3
	R6507	B-3
	R6508	B-3
	R6510	C-3
	R6512	C-3
	R6513	C-3
	R6514	C-3
	R6515	C-3
	R6516	C-3
	VD1401	A-1
	VD1402	A-1

PD-221 BOARD

	C600	A-4
	C601	A-3
	C602	A-4
	C603	A-3
	C604	A-3
	C605	A-3
	C606	B-3
	C607	B-4
	C608	B-2
	C609	B-4
	C610	A-3
	C611	A-3
	C615	B-3
	C616	B-2
	C617	B-3
	C618	B-2
	C619	B-2
	C623	B-4
	C624	B-3
	C627	B-4
	C629	B-4
	C630	A-4
	C631	B-5
	CL601	A-3
	CN602	C-3
	CN604	C-2
	CN606	C-5
	CN608	A-5
	CN609	A-2
	D604	B-2
	FB600	A-4
	IC600	A-3
	L600	A-4
	L601	B-4
	L602	B-4
	LND601	A-1
	Q600	B-4
	Q601	B-4
	Q602	B-2
	Q603	B-2
	Q604	B-2
	Q605	B-3
	Q606	B-3
	Q607	B-3
	Q612	B-5
	Q613	B-5
	R600	B-4
	R601	B-4
	R602	A-3
	R603	B-4
	R604	B-4
	R605	A-3
	R606	A-3
	R607	A-3
	R608	A-3
	R609	A-3
	R610	A-3
	R611	B-3
	R612	B-3
	R613	B-2
	R614	B-3
	R615	B-3
	R616	B-3
	R617	B-2
	R618	B-1
	R619	B-3
	R620	B-3
	R621	B-1
	R622	B-2
	R623	A-1
	R624	A-1
	R629	B-4
	R630	B-3
	R639	A-1
	R645	B-5
	R646	B-5
	R648	B-5
	R649	B-5
	R651	B-5
	R652	B-5
	R653	B-5
	R654	B-5
	R655	A-4
	R656	B-2

4-3. PRINTED WIRING BOARDS

no mark : side A
* mark : side B

JK-271 BOARD

*	C5401	A-2
	CN5401	D-1
	CN5402	B-1
	CN5403	C-1
	CN5404	B-2
	D5401	B-1
*	D5402	C-2
*	D5404	A-2
	FB5401	D-2
	FB5402	C-2
	FB5403	D-2
	FB5404	C-2
	FB5405	C-2
*	FB5406	A-2
*	FB5407	A-2
*	FB5408	A-1
	J5401	A-2
	LF5401	B-2
*	LND541	C-2
*	LND542	A-2
*	R5401	C-1
*	R5402	B-1
*	R5404	A-2
*	VDR547	A-1

SE-149 BOARD

	C520	A-2
*	C521	B-2
*	C522	A-2
	C523	B-2
*	C524	A-2
*	C525	A-2
*	C526	B-2
*	C527	B-2
*	C528	A-2
*	C529	A-2
*	C530	B-2
*	C531	B-2
*	C532	A-3
*	CN521	B-3
	CN522	A-3
*	D521	A-3
*	IC520	B-2
*	L520	A-3
	LND521	C-1
	R520	B-2
	R521	A-2
	R522	A-2
	R523	A-2
*	R524	A-2
*	R525	A-2
*	R526	B-2
*	R527	B-2
	R528	A-3
*	RB520	B-2
	SE520	B-3
	SE521	B-1

ST-106 BOARD

*	C5601	D-6
*	C5602	D-4
*	C5603	C-5
*	C5604	D-5
	C5605	A-4
*	C5606	E-5
*	C5607	D-6
	CN004	B-2
	CN5601	A-5
*	D5601	D-6
*	IC5601	E-5
*	L5601	D-6
	LN5603	A-6
	LN5604	B-5
*	Q5601	C-5
*	Q5602	E-5
*	R5601	C-5
*	R5602	D-6
*	R5603	D-6
*	R5604	D-5
*	R5605	C-5
*	R5606	C-5
*	R5607	D-5
*	R5608	D-5
*	t5601	D-5

FP-956 BOARD

	C001	B-5
	C002	A-7
	D001	B-5
	D002	C-5
	F001	B-5
	IC001	C-5
	LND003	A-1
	LND004	A-1
	LND005	A-1
	LND006	A-1
	LND007	A-1
	LND008	A-1
	LND009	A-1
	LND010	A-1
	LND011	A-1
	LND012	A-1
	PH001	B-7
	PH002	A-7
	R003	B-5
	R004	B-5

Mounted parts location of the DB-017 board and VC-366 board are not shown.
Pages from 4-117 to 4-119 are not shown.

NOTE

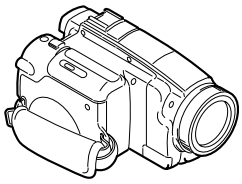
5. REPAIR PARTS LIST (1/2)

TO (2/2)

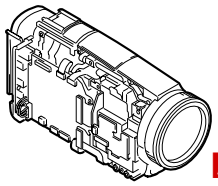
NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

EXPLODED VIEWS

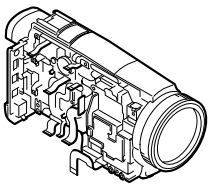


OVERALL SECTION



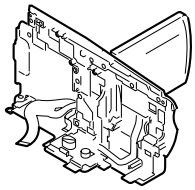
A

CABINET (R) SECTION-1



B

CABINET (R) SECTION-2

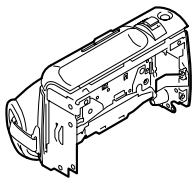


C

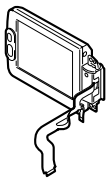
CABINET (R) SECTION-3

D

GRIP BLOCK SECTION-1

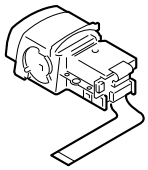


GRIP BLOCK SECTION-2



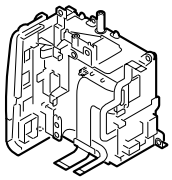
E

LCD BLOCK SECTION



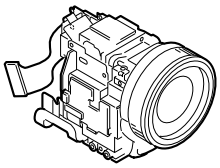
F

EVF SECTION



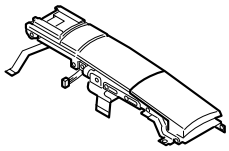
G

BATTERY SECTION

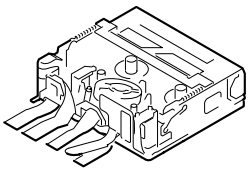


H

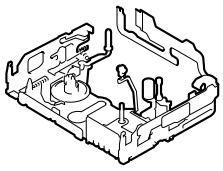
LENS SECTION



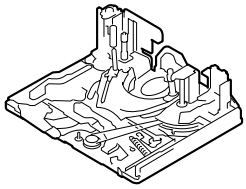
TOP CABINET SECTION



OVERALL (MECHANISM DECK-Z200)



LS CHASSIS BLOCK ASSEMBLY



MECHANICAL CHASSIS BLOCK ASSEMBLY

NOTE

5. REPAIR PARTS LIST (2/2)

TO (1/2)

NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

ELECTRICAL PARTS LIST

ACCESSORIES

CD-516 BOARD H	FP-958 FLEXIBLE BOARD C	RP-241 BOARD D
FP-939 FLEXIBLE BOARD D	JK-271 BOARD A	SE-149 BOARD G
FP-953 FLEXIBLE BOARD G	LB-015 BOARD F	ST-106 BOARD B
FP-954 FLEXIBLE BOARD H	LD-163 BOARD H	DB-017 BOARD A
FP-955 FLEXIBLE BOARD E	MS-220 BOARD A	VC-366 BOARD A
FP-956 FLEXIBLE BOARD H	PD-221 BOARD E	

5. REPAIR PARTS LIST

(ENGLISH)

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

(JAPANESE)

【使用上の注意】
- *印の部品は常備在庫しておりません。
- 分解図中の機構部品で, 図面番号のない部品は供給しません。
- −XX,−Xは標準化部品のため, セットに付いている部品と異なる場合があります。
- ここに記載されている部品は, 補修用部品であるため, 回路図及びセットに付いている部品と異なる場合があります。
- コンデンサの単位でuFはµFを示します。
- 抵抗の単位Ωは省略してあります。
  金　　被：金属被膜抵抗。
  サンキン：酸化金属被膜抵抗。
- インダクタの単位でuHはµHを示します。
- 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD... 等はそれぞれµA..., µPA..., µPB..., µPC..., µPD...を示します。

(ENGLISH)

When indicating parts by reference number, please include the board name.

(JAPANESE)

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

(ENGLISH/FRENCH)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

(JAPANESE)

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は, 必ず指定の部品を使用してください。

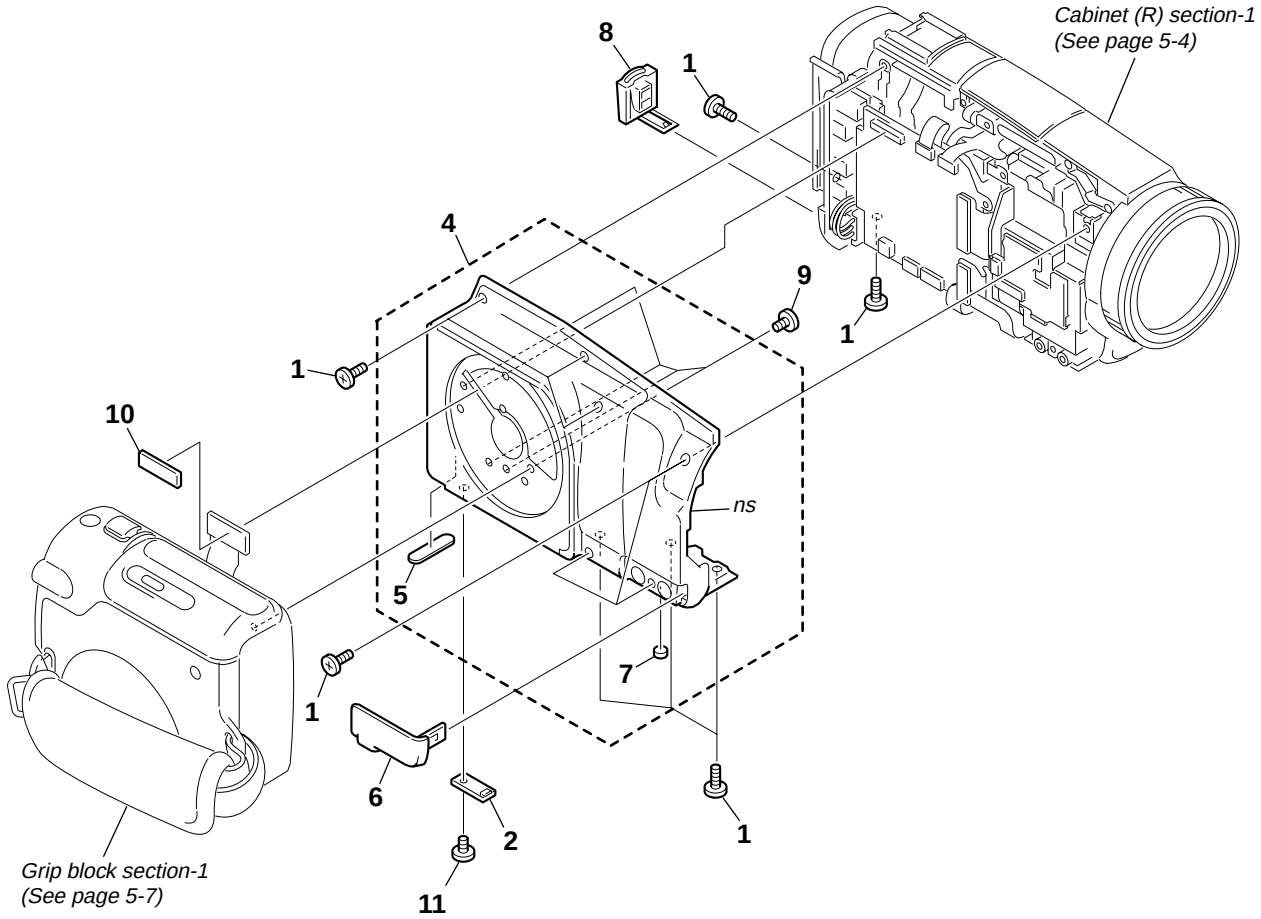
- Abbreviation
  CND: Canadian model
  KR : Korea model
  JE : Tourist model
  J : Japanese model

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION

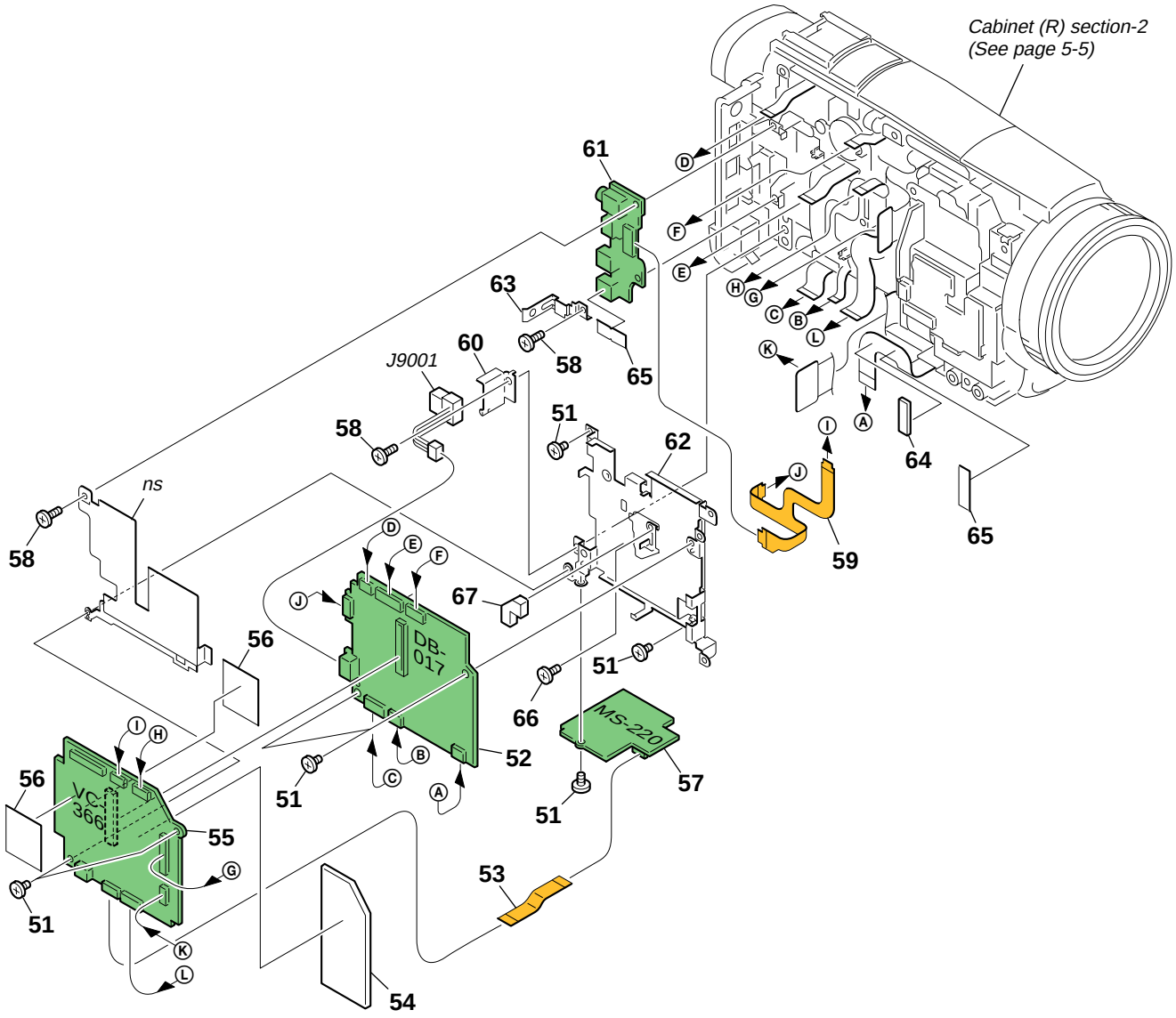
ns : not supplied



Ref. No.	Part No.	Description
1	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
2	2-059-305-01	LID, CPC
4	X-2021-932-1	CABINET (L) ASSY
5	2-055-832-01	FOOT, RUBBER
6	2-055-828-01	COVER (FRONT), JACK
7	2-055-829-01	FOOT (A), RUBBER
8	2-059-306-01	COVER, DC-IN
9	3-973-497-91	SCREW (M1.7), 0-NO. +P 2
10	2-055-998-01	SPACER (CD), B (TO) (B)
11	3-084-523-11	SCREW (M1.7EG LOCK (BLACK))

5-1-2. CABINET (R) SECTION-1

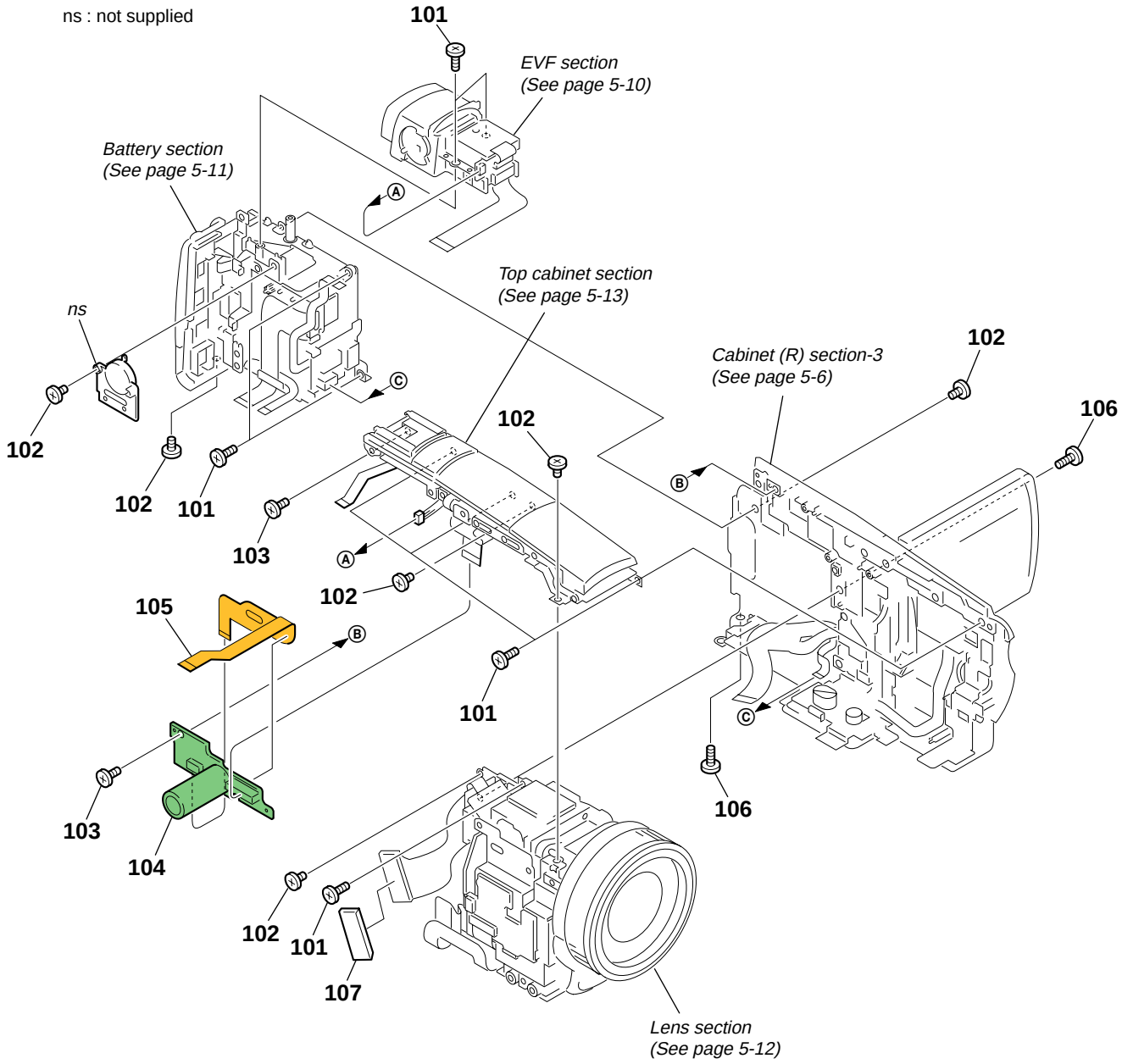
ns : not supplied



Ref. No.	Part No.	Description
51	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
52	A-1062-765-A	DB-017 BOARD, COMPLETE
53	1-863-702-11	FP-941 FLEXIBLE BOARD
54	2-067-654-01	SHEET (VC), ELECTROSTATICS
55	A-1062-983-A	VC-366 BOARD, COMPLETE (SERVICE) (HC1000)
55	A-1062-984-A	VC-366 BOARD, COMPLETE (SERVICE) (HC1000E)
56	2-149-085-01	SHEET (SI), ELECTROSTATIC
57	A-1062-767-A	MS-220 BOARD, COMPLETE
58	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
59	1-863-134-11	FP-942 FLEXIBLE BOARD
60	2-055-988-01	STAY, DC-IN
61	A-1062-768-A	JK-271 BOARD, COMPLETE
62	2-055-989-01	FRAME, CENTER
63	2-055-402-01	FRAME, JACK (REAR)
64	2-055-995-01	SPACER (40), B (TO) (B)
65	3-076-631-01	TAPE (C), FIXED
66	3-078-890-01	SCREW, TAPPING
67	2-178-642-01	C VSHIOX, ABSORBING
J9001	1-816-575-11	CONNECTOR, DC-IN

5-1-3. CABINET (R) SECTION-2

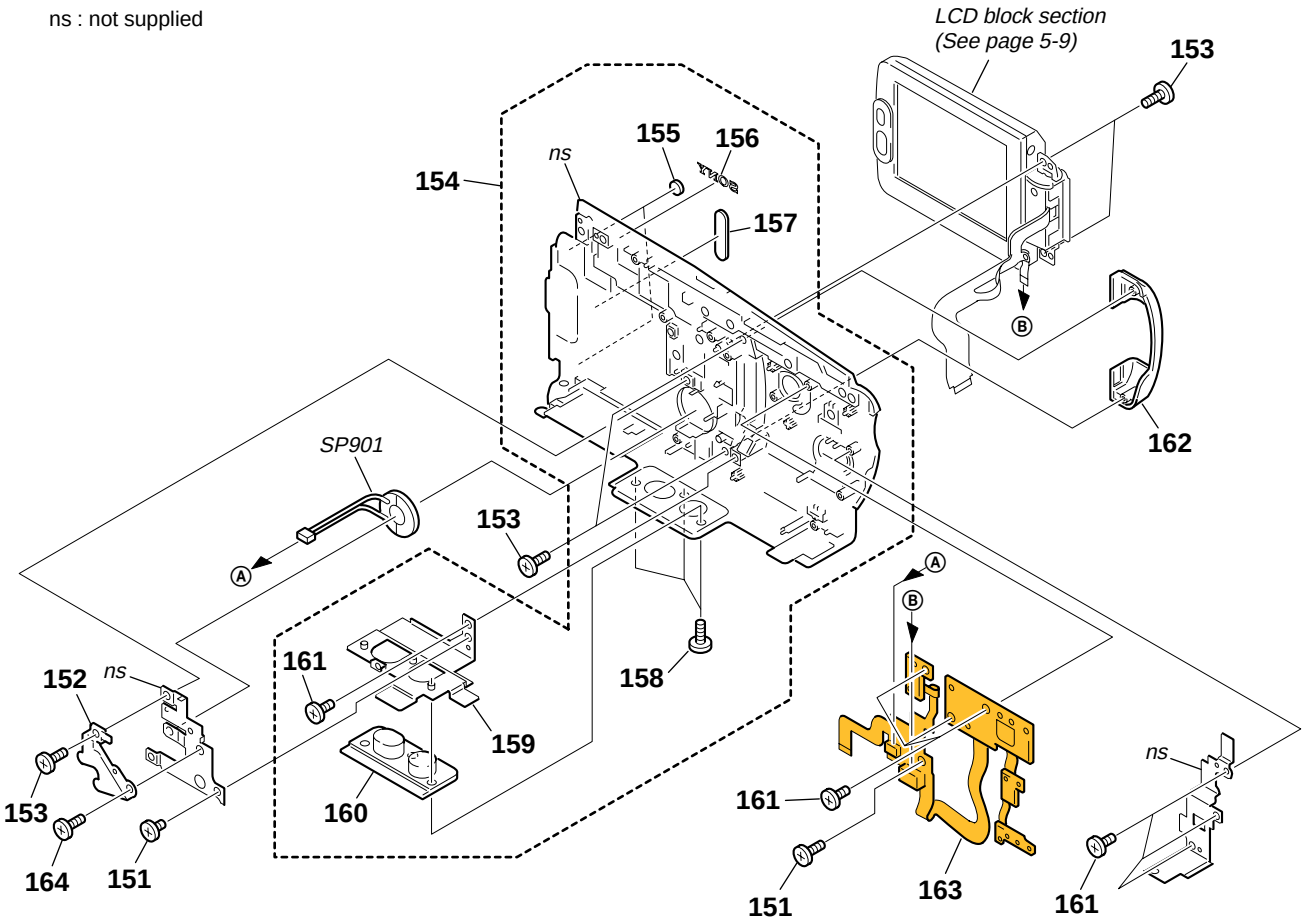
ns : not supplied



Ref. No.	Part No.	Description
101	3-080-204-21	SCREW, TAPPING, P2
102	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
103	3-078-890-01	SCREW, TAPPING
104	A-1062-769-A	ST-106 BOARD, COMPLETE
105	1-863-138-11	FP-946 FLEXIBLE BOARD
106	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
107	2-055-998-01	SPACER (CD), B (TO) (B)

5-1-4. CABINET (R) SECTION-3

ns : not supplied

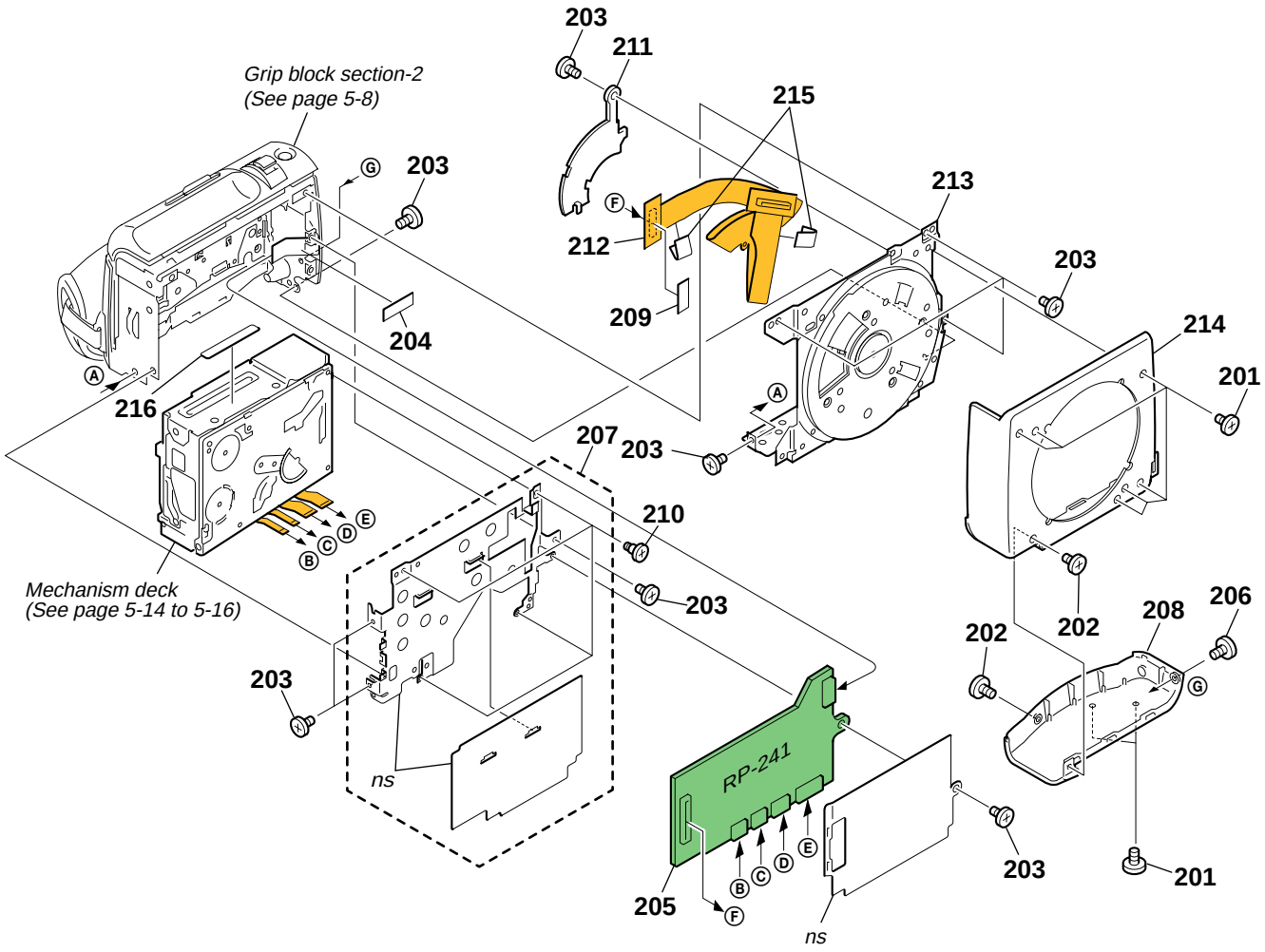


Ref. No.	Part No.	Description
151	3-078-889-11	SCREW (M1.7)
152	2-055-834-01	RETAINER, PANEL (FPC)
153	3-080-204-21	SCREW, TAPPING, P2
154	X-2021-892-1	CABINET (R) ASSY (EXCEPT J model)
154	X-2021-969-1	CABINET (R) ASSY (J model)
155	2-187-526-01	CUSHION, PANEL
156	4-942-636-01-	EMBLEM (NO.3.5), SONY
157	2-055-832-01	FOOT, RUBBER

Ref. No.	Part No.	Description
158	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
159	2-055-721-01	FRAME, TRIPOD
160	3-055-257-01	TRIPOD (LARGE)
161	3-078-890-01	SCREW, TAPPING
162	2-055-726-01	CABINET, HINGE
163	A-1062-793-A	FP-958 BOARD, COMPLETE
164	3-084-523-11	SCREW (M1.7EG LOCK (BLACK))
SP901	1-825-261-21	LOUD SPEAKER (1.6CM)

5-1-5. GRIP BLOCK SECTION-1

ns : not supplied

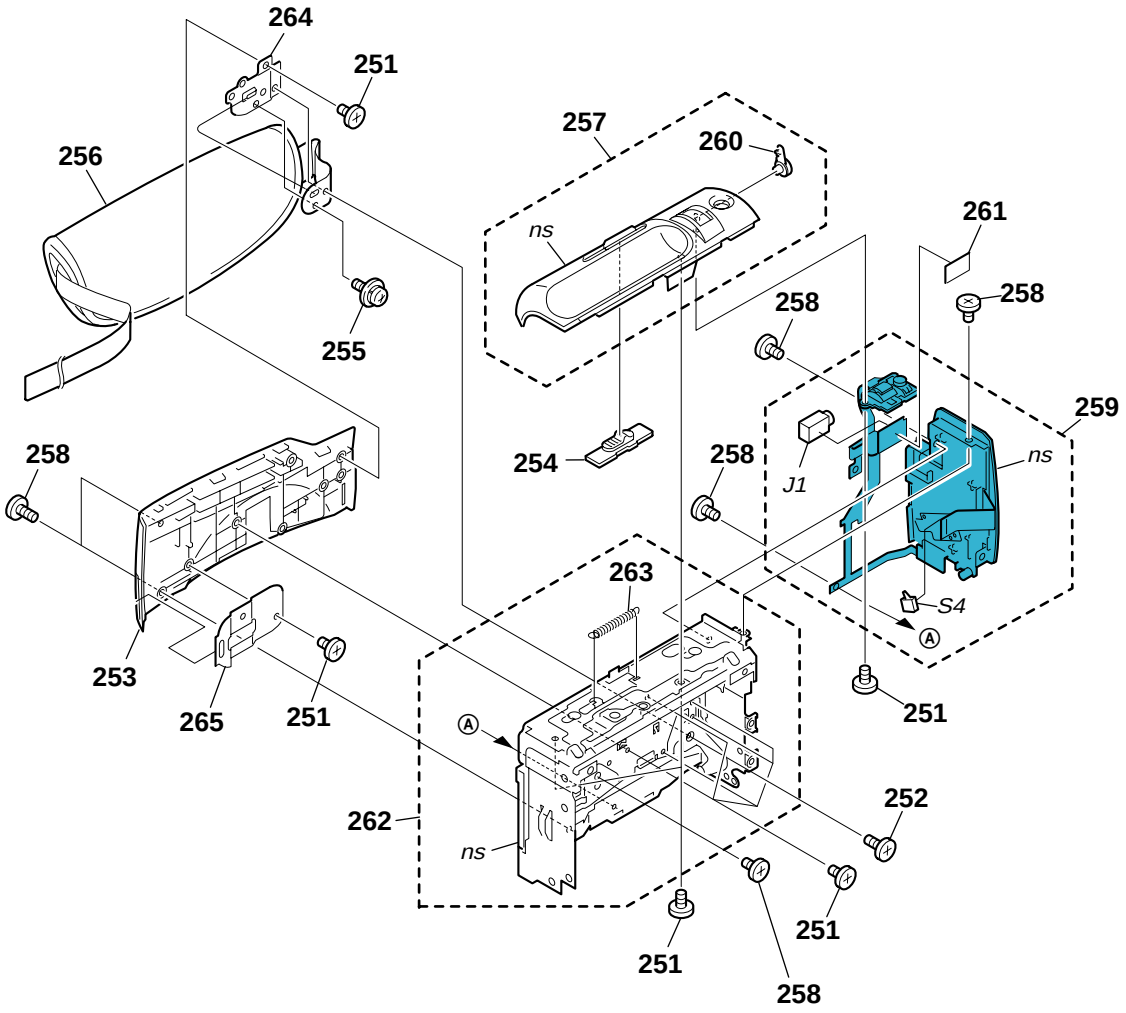


Ref. No.	Part No.	Description
201	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
202	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
203	3-078-889-11	SCREW (M1.7)
204	3-941-343-01	TAPE (A)
205	A-1062-770-A	RP-241 BOARD, COMPLETE
206	3-080-204-21	SCREW, TAPPING, P2
207	X-2021-937-1	FRAME ASSY, MD
208	2-055-848-01	CABINET, GRIP (BOTTOM)

Ref. No.	Part No.	Description
209	2-055-994-01	SPACER (CD), B (TO) (B)
210	3-062-214-01	SCREW (M1.4X1.5)
211	2-055-660-01	RETAINER, FPC
212	A-1062-788-A	FP-939 BOARD, COMPLETE
213	X-2021-894-1	HINGE ASSY, GRIP
214	X-2021-889-1	CABINET ASSY, GRIP (R)
215	2-149-530-01	SHEET (939), WAVE
216	3-081-221-01	LABEL (Z), LS

5-1-6. GRIP BLOCK SECTION-2

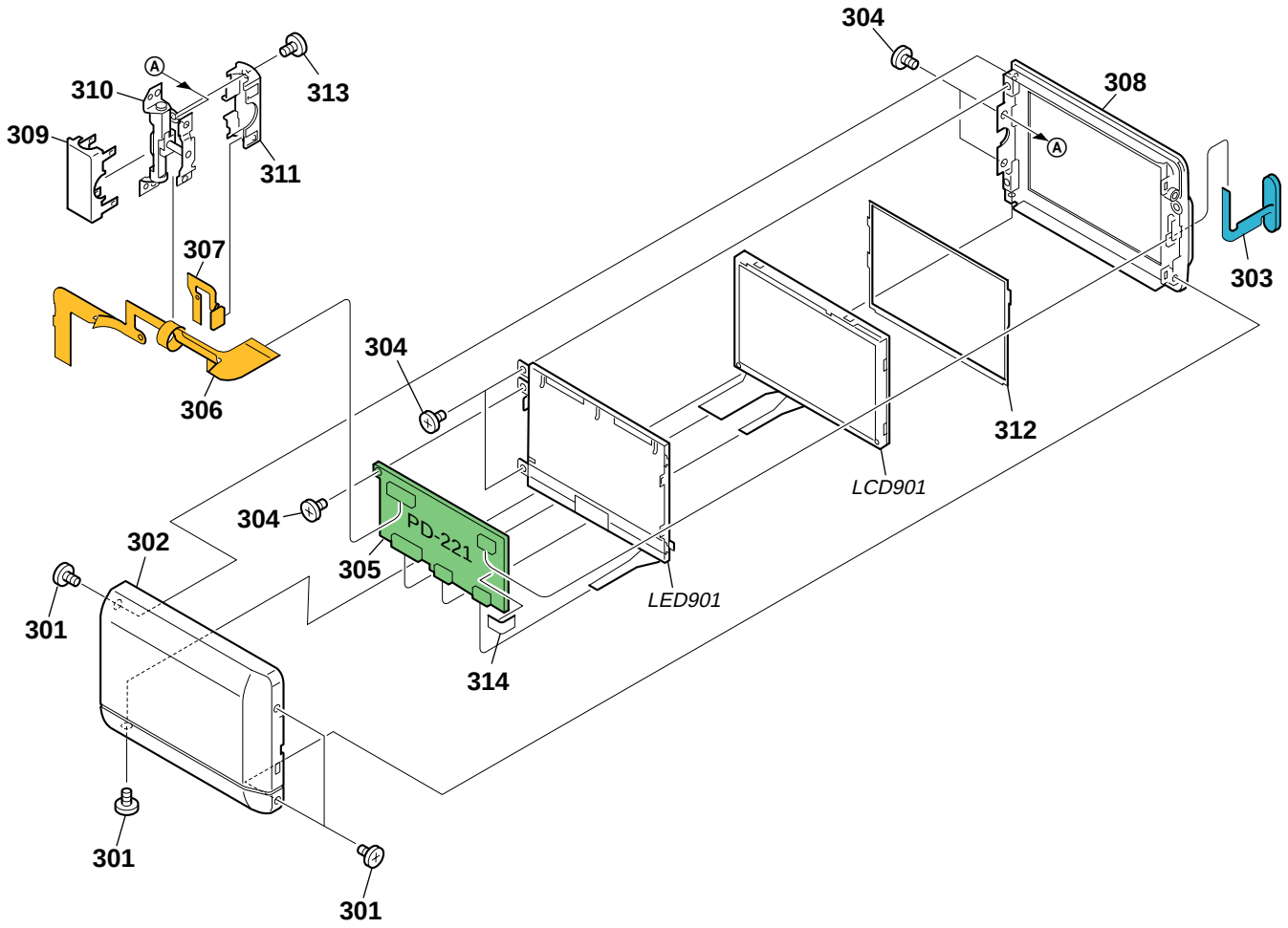
ns : not supplied



Ref. No.	Part No.	Description
251	3-078-890-01	SCREW, TAPPING
252	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
253	2-055-813-01	CABINET, GRIP (LID)
254	2-055-851-01	KNOB, EJECT
255	3-082-266-01	PAN-HEAD SCREW WITH SEAT (M2)
256	2-055-815-01	BELT, GRIP
257	X-2021-888-1	CABINET ASSY, GRIP (UPPER) (J model)
257	X-2021-947-1	CABINET ASSY, GRIP (UPPER) (EXCEPT J model)
258	2-187-345-01	SCREW (M1.7), P2
259	1-478-786-11	SWITCH BLOCK, CONTROL (PS8200) (J model)

Ref. No.	Part No.	Description
259	1-478-786-21	SWITCH BLOCK, CONTROL (PS8200) (EXCEPT J model)
260	2-055-818-01	COVER (HP), JACK
261	2-108-188-01	SPACER, HP
262	X-2021-936-1	FRAME ASSY, GRIP
263	2-055-800-01	SPRING, TENSION
264	2-055-814-01	PLATE (R), FIXED, BELT
265	2-055-816-01	PLATE (F), FIXED, BELT
J1	1-784-943-51	JACK (SMALL TYPE)
S4	1-786-179-31	SWITCH, PUSH (KEY)

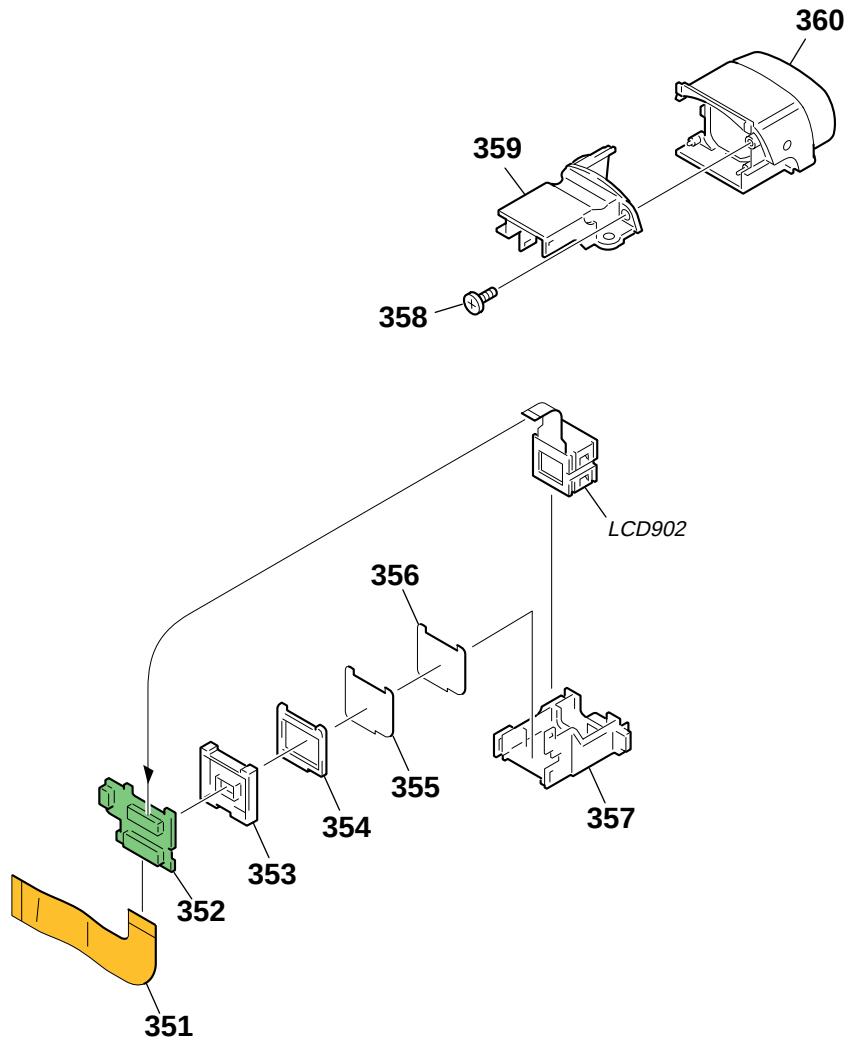
5-1-7. LCD BLOCK SECTION



Ref. No.	Part No.	Description
301	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
302	X-2021-970-1	CABINET (C) ASSY, LCD
303	1-478-787-11	SWITCH BLOCK, CONTROL (SS8200)
304	4-223-676-10	SCREW (1.7), MI
305	A-1062-775-A	PD-221 BOARD, COMPLETE
306	1-863-133-11	FP-940 FLEXIBLE BOARD
307	A-1062-791-A	FP-955 BOARD, COMPLETE
308	2-055-735-01	CABINET (M), LCD (J model)
308	2-055-735-11	CABINET (M), LCD (EXCEPT J model)

Ref. No.	Part No.	Description
309	2-055-740-01	COVER (C), HINGE
310	X-2021-891-1	HINGE (82) ASSY
311	2-055-741-01	COVER (M), HINGE
312	2-055-736-01	SHEET, PROTECTION, PANEL
313	2-187-345-01	SCREW (M1.7), P2
314	3-076-631-01	TAPE (C), FIXED
LCD901	8-753-052-41	ACX500DMM-J
LED901	1-477-759-11	BLOCK LIGHT GUIDE PLATE (2.5)

5-1-8. EVF SECTION

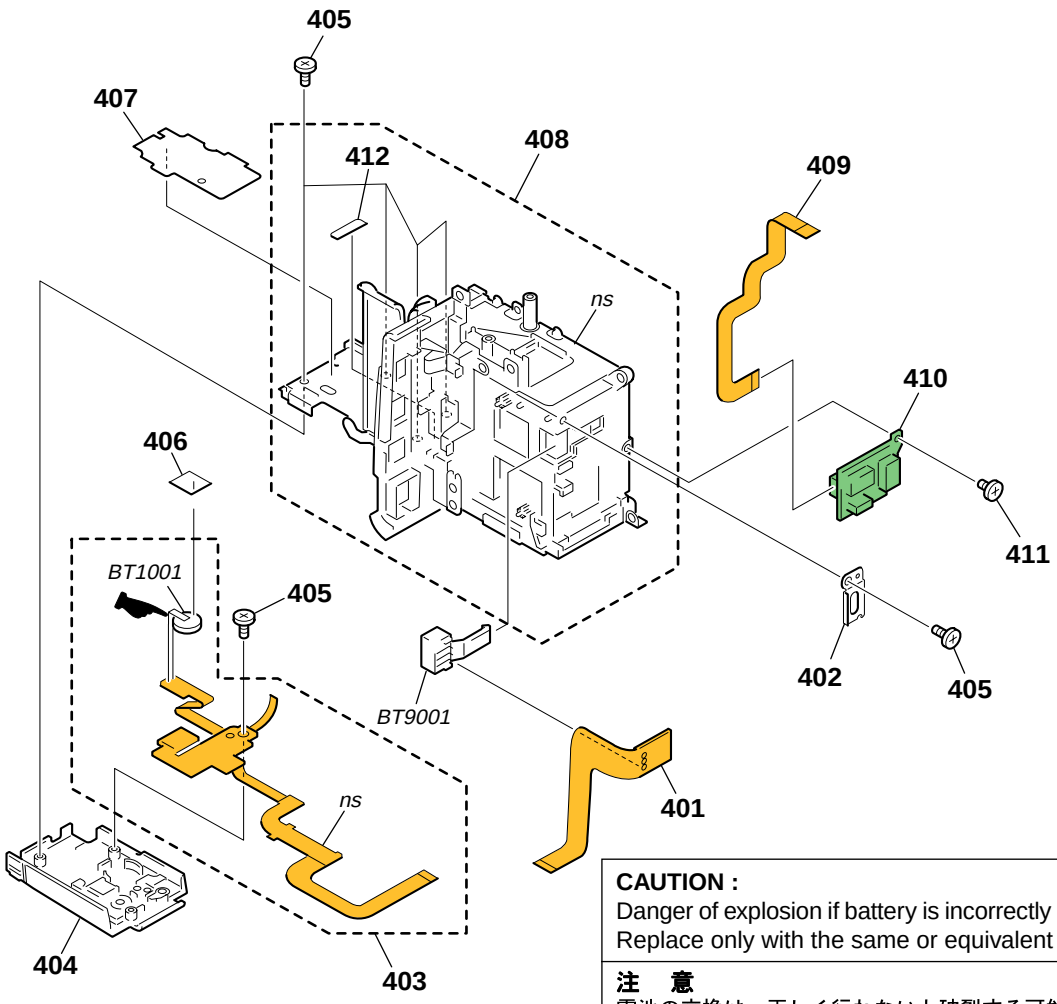


Ref. No.	Part No.	Description
351	1-863-135-11	FP-943 FLEXIBLE BOARD
352	A-1062-774-A	LB-015 BOARD, COMPLETE
353	3-089-415-01	GUIDE, LAMP
354	3-089-419-01	CUSHION, LCD
355	3-089-417-01	ILLUMINATOR
356	3-089-416-01	SHEET, PRISM

Ref. No.	Part No.	Description
357	2-055-964-01	CABINET (LOWER), VF
358	3-080-204-21	SCREW, TAPPING, P2
359	X-2021-940-1	CABINET (UPPER) ASSY, VF
360	X-2021-939-1	EYE CUP ASSY
LCD902	8-753-208-78	LCX059AKA-J

5-1-9. BATTERY SECTION

ns : not supplied



CAUTION :
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

注　意
電池の交換は，正しく行わないと破裂する可能性があります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

: BT1001 (Lithium battery) FP-953 board on the mount position. (See page 4-99)

Ref. No.	Part No.	Description
401	1-863-139-11	FP-957 FLEXIBLE BOARD
402	2-055-795-01	STOPPER, BT CONNECTOR
403	A-1062-789-A	FP-953 BOARD, COMPLETE
404	X-2021-935-1	LID ASSY, BATTERY (J model)
404	X-2021-946-1	LID ASSY, BATTERY (EXCEPT J model)
405	3-078-890-01	SCREW, TAPPING
406	2-055-847-01	SHEET, BATTERY
407	2-055-796-01	SHEET, BT LID

Ref. No.	Part No.	Description
408	X-2021-933-1	HOLDER ASSY, BT
409	1-863-137-11	FP-945 FLEXIBLE BOARD
410	A-1062-773-A	SE-149 BOARD, COMPLETE
411	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
412	2-176-380-01	PLATE, SCREW GUARD
⚠BT1001	1-756-191-21	BATTERY, LITHIUM (SECONDARY)0
BT9001	1-694-854-11	BATTERY TERMINAL BOARD

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

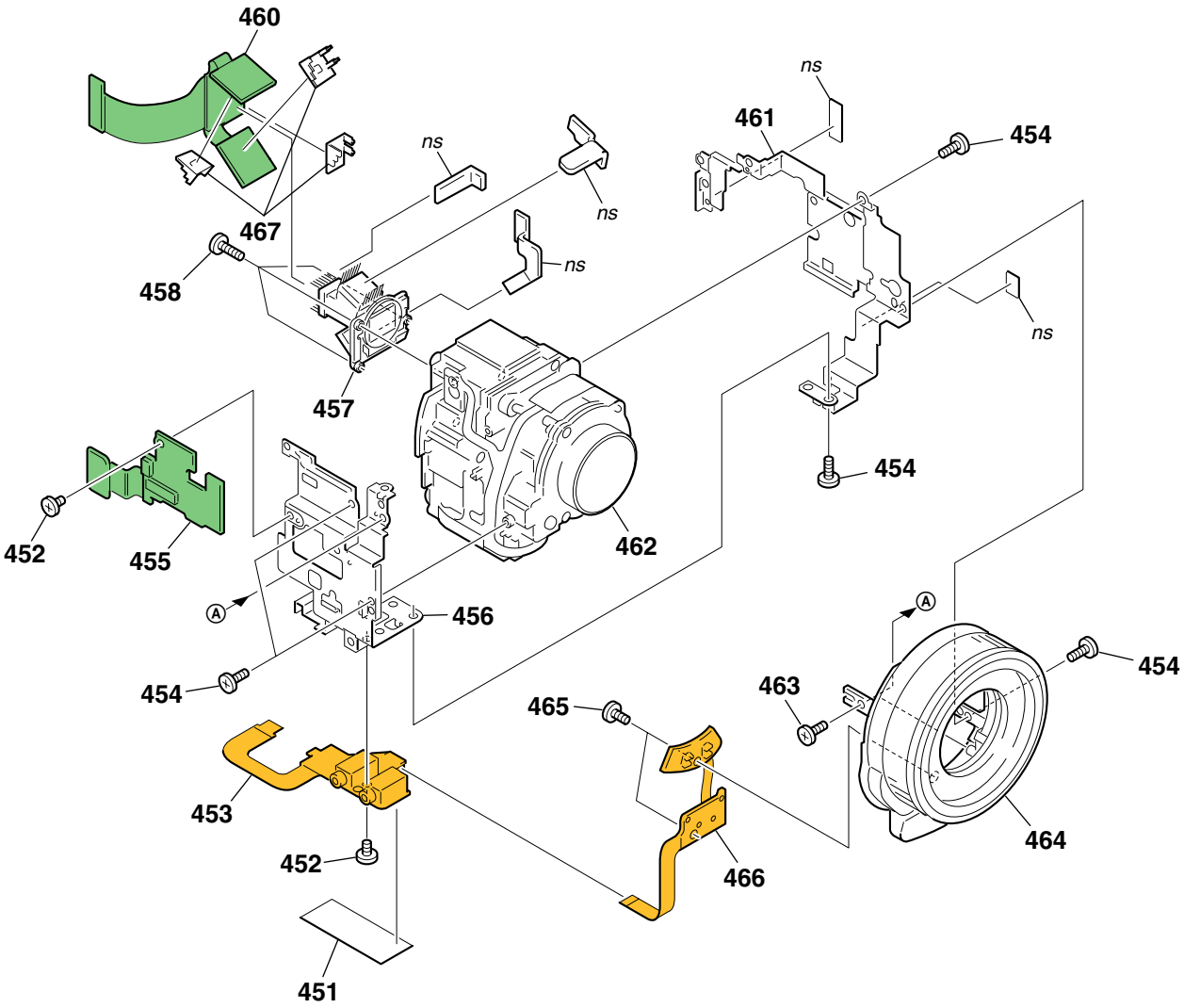
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

5. REPAIR PARTS LIST

5-1-10. LENS SECTION

ns : not supplied



Ref. No.	Part No.	Description
451	2-055-846-01	SHEET (MC), INSULATING
452	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
453	A-1062-790-A	FP-954 BOARD, COMPLETE
454	3-080-204-21	SCREW, TAPPING, P2
455	A-1062-771-A	LD-163 BOARD, COMPLETE
456	2-055-966-01	FRAME (L), LENS
457	A-7012-866-A	PRISM ASSY (SERVICE ASSY) (INCLUDING 3CCD) (IC5301,IC5302,IC5306 are included in PRISM ASSY (A-7012-866-A).)
458	3-078-890-41	SCREW, TAPPING

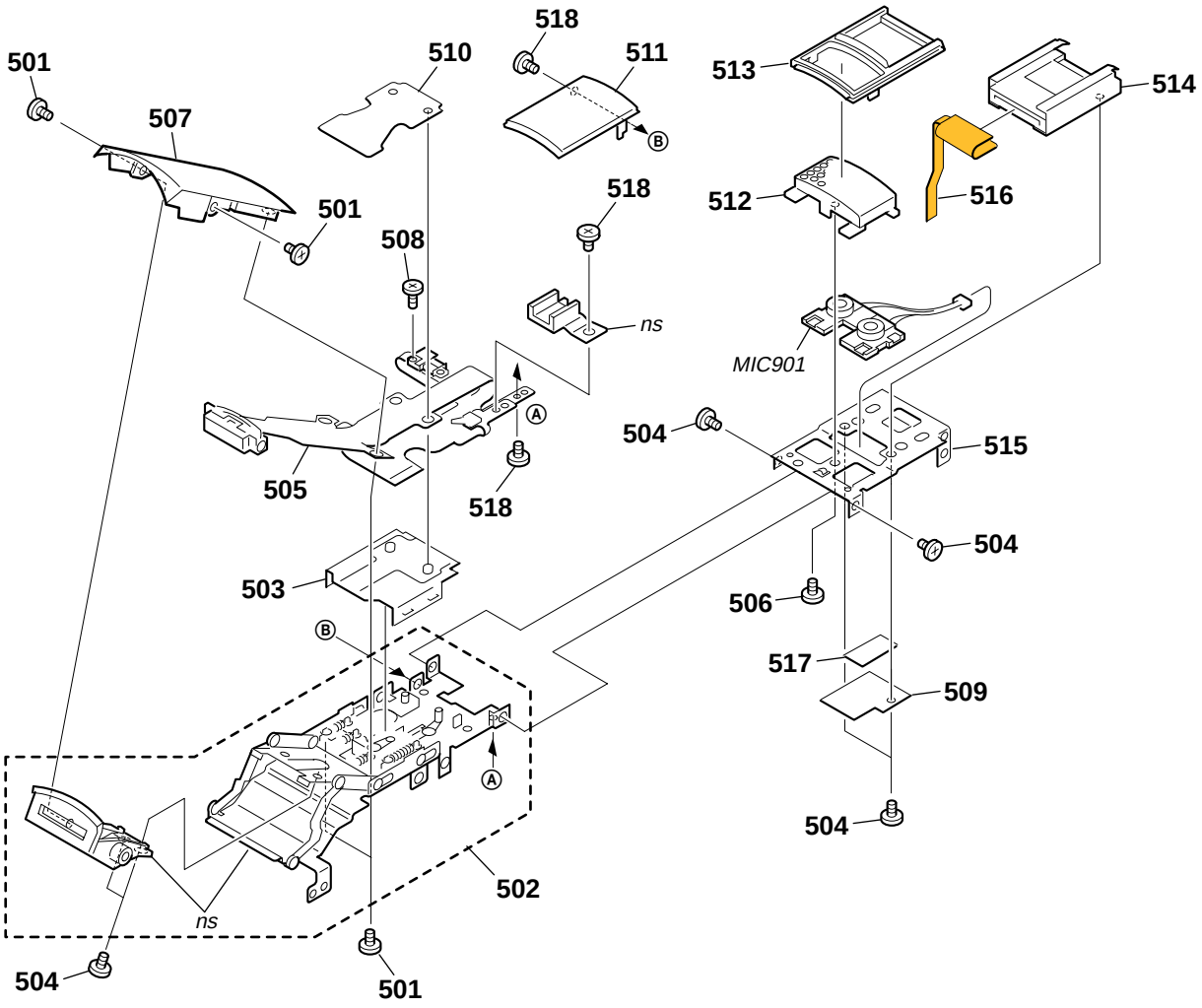
Ref. No.	Part No.	Description
460	A-1062-772-A	CD-516 BOARD, COMPLETE (IC5301,IC5302,IC5306 are not included in this COMPLEETE board.)
461	X-2021-941-1	FRAME (R) ASSY, LENS
462	A-1071-275-A	LENS, VIDEO (B144B)
463	3-080-198-31	SCREW (M1.7), LOCK ACE, P2
464	X-2021-945-1	PANEL ASSY, FRONT
465	3-078-890-01	SCREW, TAPPING
466	A-1062-792-A	FP-956 BOARD, COMPLETE
467	2-055-845-01	SPACER, CCD

Be sure to read “Precautions upon replacing CCD imager” on page 4-9 when changing the CCD imager.

CCDイメージャの交換時はサービスマニュアル 4-10ページの “CCDイメージャ交換時の注意” を必ずお読みください。

5-1-11. TOP CABINET SECTION

ns : not supplied



Ref. No.	Part No.	Description
501	3-080-204-01	SCREW, TAPPING, P2
502	X-2021-967-1	BASE ASSY, ST
503	2-055-881-01	PLATE, BLIND, ST SLIDE
504	3-080-198-11	SCREW (M1.7), LOCK ACE, P2
⚠505	1-478-788-11	FLASH UNIT
506	3-078-890-01	SCREW, TAPPING
507	2-055-880-01	CABINET (UPPER), ST
508	3-232-536-21	SCREW (M1.4) (EG)
509	2-067-411-01	SHEET (MIC), SHIELD
510	2-055-883-01	SHEET, ST BLIND
511	2-055-953-01	TOP, CABINET (HC1000:J)

Ref. No.	Part No.	Description
511	2-055-953-11	TOP, CABINET (HC1000: US, CND, E, JE, KR)
511	2-055-953-21	TOP, CABINET (HC1000E)
512	X-2021-943-1	GRILLE ASSY, MICROPHONE
513	2-055-954-01	COVER, SHOE
514	1-793-996-11	CONNECTOR, EXTERNAL
515	X-2021-942-1	FRAME ASSY, TOP
516	1-863-136-11	FP-944 FLEXIBLE BOARD
517	3-051-348-01	RETAINER (MIC), HARNESS
518	3-973-497-91	SCREW (M1.7), 0-No. +P2
MIC901	1-542-589-11	MICROPHONE UNIT

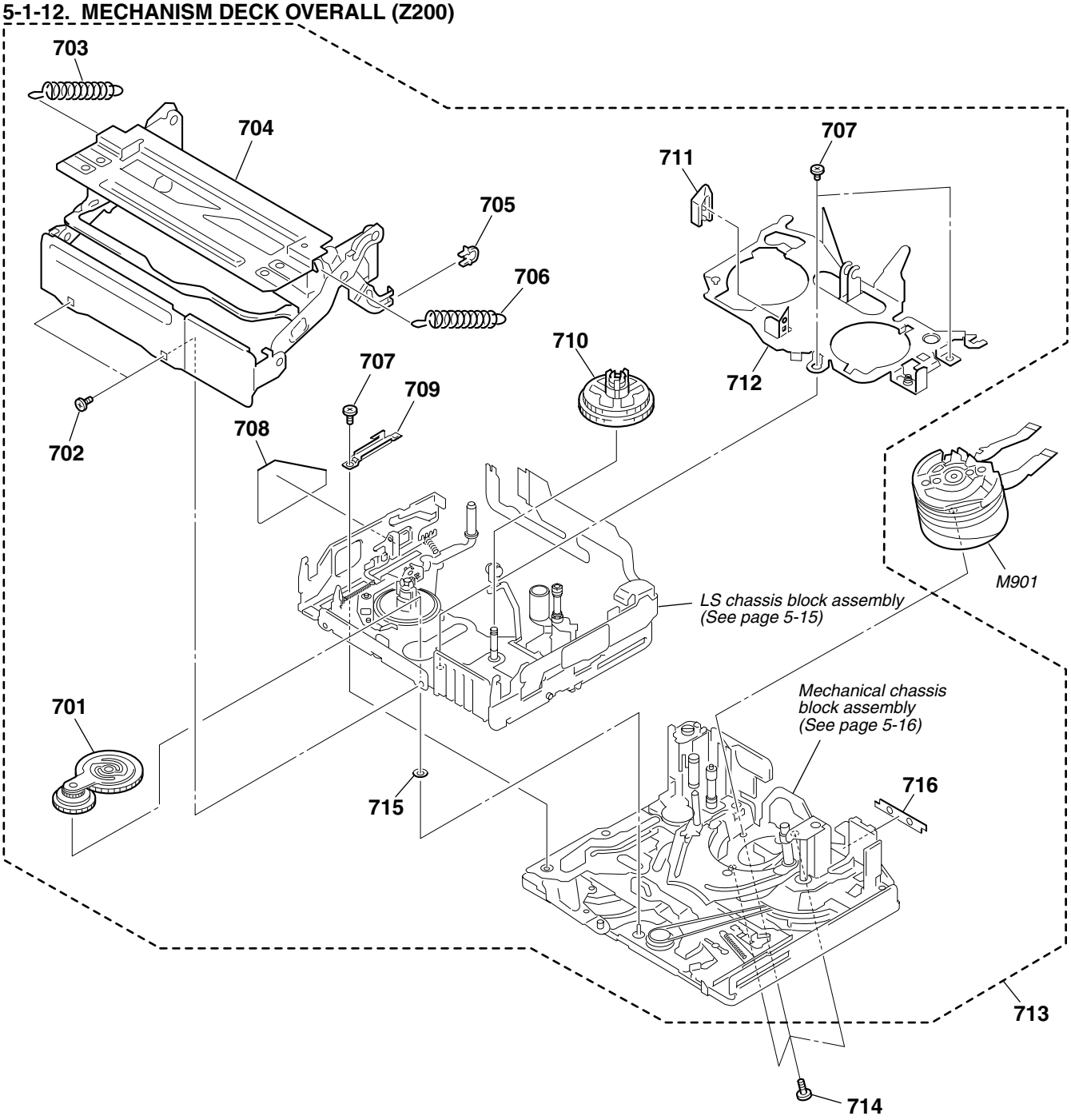
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

5. REPAIR PARTS LIST

5-1-12. MECHANISM DECK OVERALL (Z200)

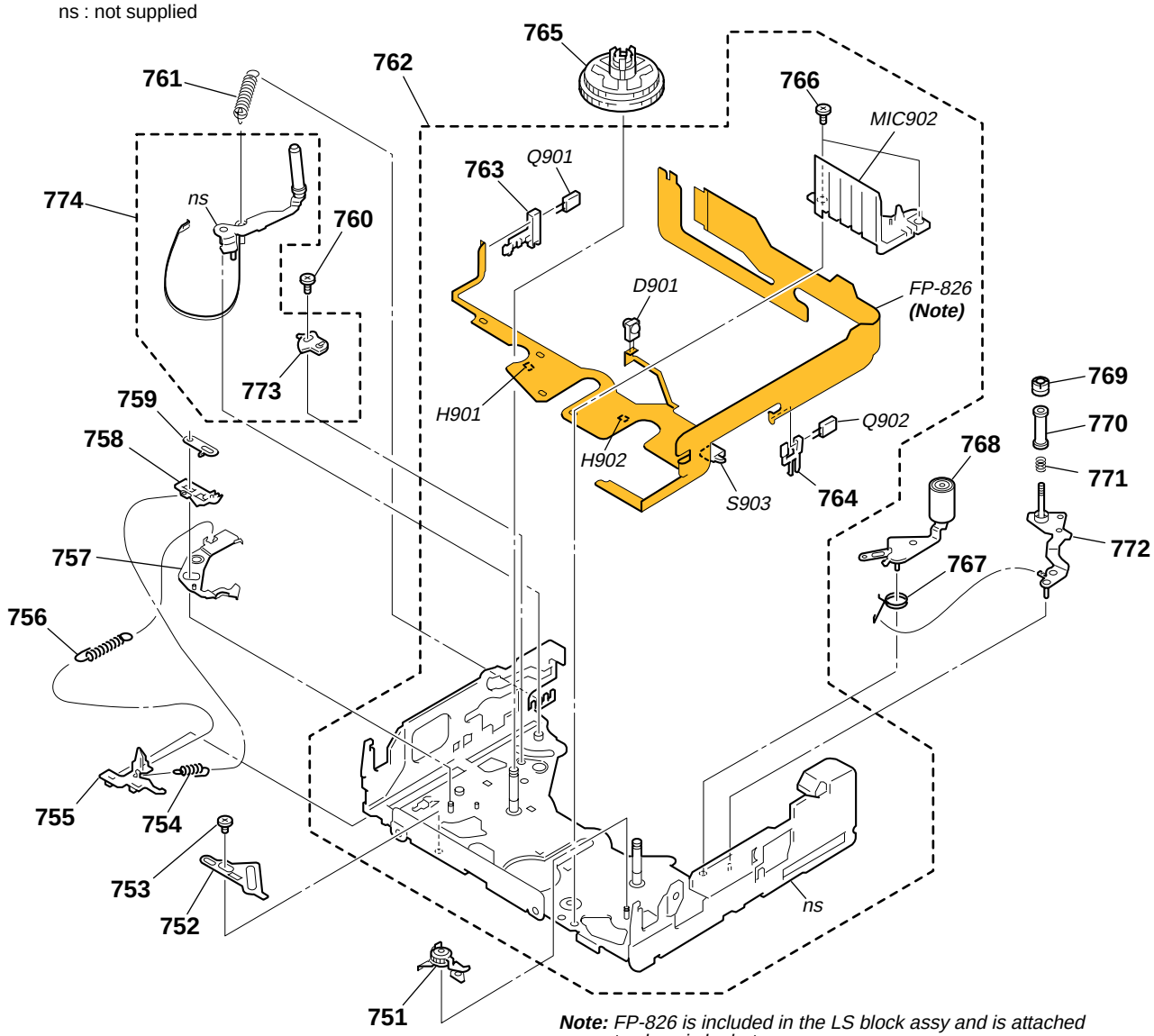


Ref. No.	Part No.	Description
701	X-3952-938-6	GEAR ASSY, GOOSENECK
702	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
703	3-079-206-02	SPRING (POP UP S), EXTENSION
704	X-3952-939-3	COMPARTMENT ASSY, CASSETTE
705	3-079-367-01	DAMPER, CASSETTE COMPARTMENT
706	3-079-215-02	SPRING (POP UP T), EXTENSION
707	3-085-330-01	SCREW, SPECIAL
708	3-080-545-01	COVER, SENSOR S
709	3-079-364-01	RETAINER, LS GUIDE

Ref. No.	Part No.	Description
710	X-3952-937-1	TABLE ASSY, T REEL
711	3-079-366-01	RELEASE, REEL LOCK
712	X-3953-257-1	PLATE ASSY, RETAINER
713	A-7095-947-A	MD (Z200) SUB ASSY
714	3-079-741-02	SCREW, DRUM FIXING
715	3-748-682-01	WASHER, T
716	3-087-881-01	SHEET, ADHESIVE, FLEXIBLE
M901	A-7048-994-A	DRUM (DEH-30B-R)

5-1-13. LS CHASSIS BLOCK ASSEMBLY

ns : not supplied



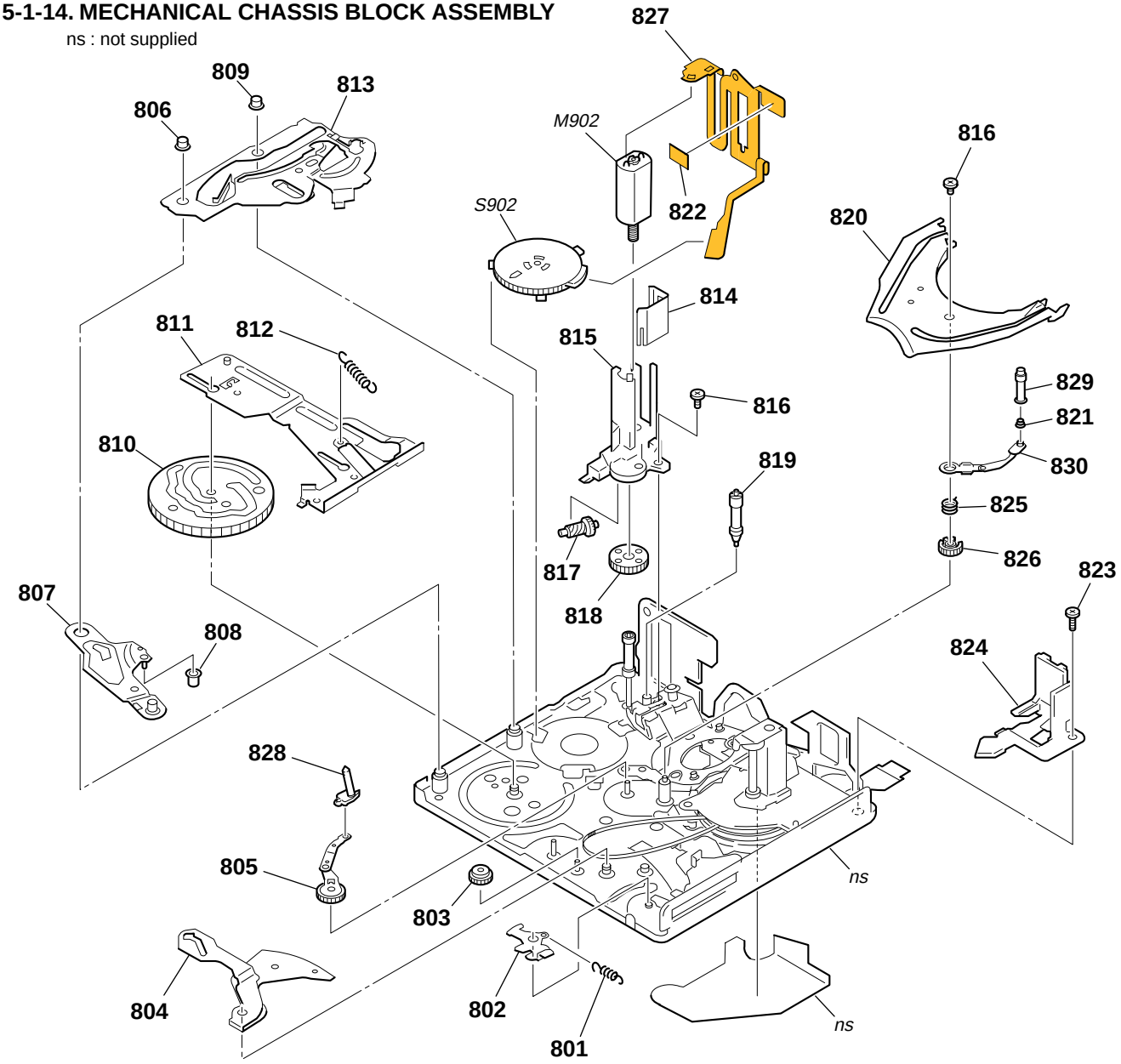
Note: *FP-826 is included in the LS block assy and is attached to chassis by hot-press.*
Because installation of FP-826 requires a very high accuracy, FP-826 is not supplied as an independent service parts.

Ref. No.	Part No.	Description
751	A-7095-402-B	BRAKE (T) BLOCK ASSY
752	3-079-241-01	PLATE, LS CAM
753	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
754	3-079-246-01	SPRING (RELEASE RACK), EXTENSION
755	3-079-248-01	POSITIONING (S), CASSETTE
756	3-079-244-01	SPRING (ULE), EXTENSION
757	X-3952-932-1	BRAKE ASSY, ULE
758	3-079-245-01	RACK (S), RELEASE
759	3-079-247-01	BRAKE (S)
760	3-059-090-11	SCREW (M1.4X2.5), SPECIAL HEAD
761	3-079-242-01	SPRING, TENSION
762	A-7095-951-A	LS BLOCK ASSY
763	3-079-267-01	HOLDER (S), SENSOR
764	3-079-268-01	HOLDER (T), SENSOR
765	X-3952-936-2	TABLE ASSY, S REEL
766	3-085-330-01	SCREW, SPECIAL

Ref. No.	Part No.	Description
767	3-079-243-02	SPRING (PINCH RETURN), TORSION
768	X-3952-934-1	ARM ASSY, PINCH
769	3-052-062-02	NUT, TG7
770	3-079-219-02	TG7
771	3-081-591-01	SPRING, COMPRESSION (TG7)
772	X-3952-935-3	ARM ASSY, TG7
773	3-079-237-01	ADJUSTOR, BAND
774	A-7095-403-B	TG2 ARM BLOCK ASSY
D901	6-500-652-01	DIODE GL453SE0000F (TAPE LED)
H901	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (S REEL)
H902	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (T REEL)
MIC902	1-817-175-12	PIN, CONNECTOR (WITH DETECTION SWITCH)
Q901	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE END)
Q902	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE TOP)
S903	1-529-566-51	SWITCH, PUSH (1 KEY) (C.C. DOWN)

5-1-14. MECHANICAL CHASSIS BLOCK ASSEMBLY

ns : not supplied



Ref. No.	Part No.	Description
801	3-079-314-01	SPRING (EJ), EXTENSION
802	3-079-327-01	ARM, EJ
803	3-079-323-01	GEAR, CONVERSION
804	3-079-324-01	ARM, GL DRIVING
805	X-3952-928-1	GL (S) ASSY
806	3-079-315-01	ROLLER (S1), LS GUIDE
807	X-3952-925-1	ARM ASSY, LS
808	3-079-320-01	ROLLER, LS
809	3-079-316-01	ROLLER (S2), LS GUIDE
810	3-079-319-01	GEAR, CAM
811	X-3952-941-1	SLIDER ASSY, M
812	3-079-321-02	SPRING (PINCH), EXTENSION
813	X-3952-940-2	PLATE ASSY, TG2 CAM
814	3-079-312-01	SHIELD, MOTOR
815	3-079-307-02	HOLDER, MOTOR
816	3-085-330-01	SCREW, SPECIAL

Ref. No.	Part No.	Description
817	3-079-308-01	SHAFT, WORM
818	3-079-309-01	GEAR, DECELERATION
819	X-3952-942-2	ROLLER ASSY, TG3
820	3-079-325-01	RAIL, GUIDE
821	3-079-295-02	SPRING, TG5
822	1-677-049-11	FP-228 FLEXIBLE BOARD (DEW SENSOR)
823	3-079-328-01	SCREW (M1.4), SPECIAL HEAD
824	3-079-326-02	SUPPORT, TG7
825	3-079-301-01	SPRING (GLT), TORSION
826	3-079-298-01	GEAR (T), GL
827	1-686-798-11	FP-467 FLEXIBLE BOARD
828	X-3952-927-2	COASTER (S) ASSY
829	X-3952-930-3	ROLLER ASSY, TG5
830	X-3952-929-1	COASTER (T) ASSY
M902	A-7095-396-A	MOTOR BLOCK ASSY, L (LOADING)
S902	1-477-679-11	ROTARY, ENCODER (MODE SWITCH)

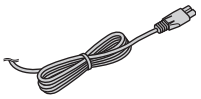
5. REPAIR PARTS LIST

• EXCEPT J MODEL

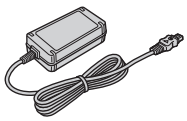
Checking supplied accessories.

to J MODEL

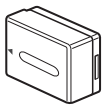
Make sure that the following accessories are supplied with your camcorder.



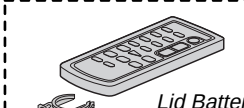
Power cord (Main lead) (1)
(AEP, E, EE model)
⚠ 1-769-608-11
Power cord (Main lead) (1)
(CH model)
⚠ 1-782-476-13
Power cord (Main lead) (1)
(UK model)
⚠ 1-783-374-11
Power cord (Main lead) (1)
(US, CND model)
⚠ 1-790-107-22
Power cord (Main lead) (1)
(JE model)
⚠ 1-790-732-12
Power cord (Main lead) (1)
(KR model)
⚠ 1-776-985-11
Power cord (Main lead) (1)
(AUS model)
⚠ 1-827-945-11
Power cord (Main lead) (1)
(UK model)
⚠ 1-827-946-11



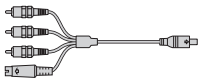
AC Adaptor (1)
(AC-L25A/L25B)
⚠ 1-477-534-11



Rechargeable battery pack (1)
(NP-FF71)
(not supplied)

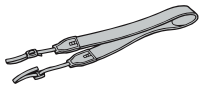


Wireless Remote Commander (1)
(RMT-831)
1-477-898-41

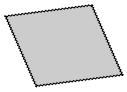


A/V connecting cable (1)
1-823-156-13

USB cable (1)
1-824-382-21

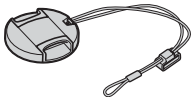


Shoulder strap (1)
2-021-016-01

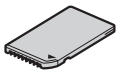


Cleaning cloth (1)
3-073-861-01

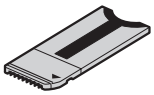
Lens hood (1)
3-085-395-01



Lens cap (1)
X-2021-944-1

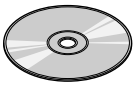


"Memory Stick Duo" (1)
(not supplied)

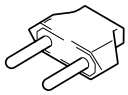


Memory Stick Duo adaptor (1)
(not supplied)

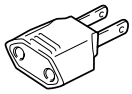
21-pin adaptor (1)
(AEP, UK, EE model)
1-770-783-21



CD-ROM
(SPVD-012(V) USB Driver) (1)
(US, CND model)
3-086-790-01
CD-ROM
(SPVD-012 USB Driver) (1)
(EXCEPT US, CND model)
3-087-821-01



2-pin conversion adaptor (1)
(JE model)
1-569-007-12



2-pin conversion adaptor (1)
(E model)
1-569-008-12

• Abbreviation
CND : Canadian model
EE : East European model
AUS : Australian model
CH : Chinese model
JE : Tourist model
KR : Korean model

Other accessories

2-055-844-11 MANUAL, INSTRUCTION (ENGLISH) (HC1000:US,CND,E,JE)
2-055-844-21 MANUAL, INSTRUCTION (FRENCH)(HC1000:CND)
2-055-844-31 MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (HC1000:E,JE)
2-055-844-41 MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (HC1000:E)
2-055-844-51 MANUAL, INSTRUCTION (KOREAN) (HC1000:JE,KR)

2-067-391-11 MANUAL, INSTRUCTION (ENGLISH) (HC1000E:E,JE,AEP,UK,AUS)
2-067-391-21 MANUAL, INSTRUCTION (FRENCH) (HC1000E:AEP)
2-067-391-31 MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (HC1000E:AEP)
2-067-391-41 MANUAL, INSTRUCTION (ITALIAN/GREEK) (HC1000E:AEP)
2-067-391-51 MANUAL, INSTRUCTION (GERMAN/DUTCH) (HC1000E:AEP)

2-067-391-61 MANUAL, INSTRUCTION (RUSSIAN) (HC1000E:E,JE)
2-067-391-71 MANUAL, INSTRUCTION (ARABIC/PERSIAN) (HC1000E:E)
2-067-391-81 MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (HC1000E:E,JE,CH)
3-087-936-11 MANUAL (PC), INSTRUCTION (ENGLISH) (HC1000:US,CND,E,JE/HC1000E:AEP,UK,E,JE,AUS)
3-087-936-21 MANUAL (PC), INSTRUCTION (FRENCH) (HC1000:CND/HC1000E:AEP)
3-087-936-31 MANUAL (PC), INSTRUCTION (GERMAN/DUTCH) (HC1000E:AEP)
3-087-936-41 MANUAL (PC), INSTRUCTION (SPANISH/PORTUGUESE) (HC1000:E,JE/HC1000E:AEP,E,JE)
3-087-936-51 MANUAL (PC), INSTRUCTION (ITALIAN/GREEK) (HC1000E:AEP)
3-087-936-61 MANUAL (PC), INSTRUCTION (SWEDISH/RUSSIAN) (HC1000E:E,JE)
3-087-937-11 MANUAL (PC), INSTRUCTION (ARABIC/PERSIAN) (HC1000E:E)
3-087-937-21 MANUAL (PC), INSTRUCTION (TRADITIONAL CHINESE) (HC1000:E)
3-087-937-31 MANUAL (PC), INSTRUCTION (SIMPLIFIED CHINESE) (HC1000E:E,JE,CH)
3-087-937-41 MANUAL (PC), INSTRUCTION (KOREAN) (HC1000:JE,KR)

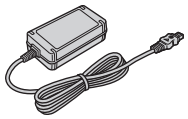
Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note :** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5. REPAIR PARTS LIST

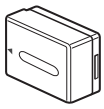
• J MODEL

付属品

電源コード (1)
⚠1-790-732-12

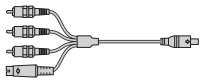


AC アダプター (1)
(AC-L25A)
⚠1-477-534-11



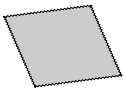
リチャージャブル
バッテリーパック (1)
(NP-FF71)
(供給せず)

ワイヤレスリモコン (1)
(RMT-831)
1-477-898-51



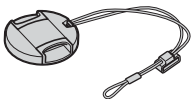
AV接続ケーブル (1)
1-823-156-13

USBケーブル (1)
1-824-382-21

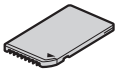


クリーニングクロス (1)
3-073-861-01

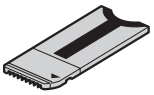
レンズフード (1)
3-085-395-01



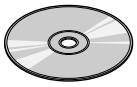
レンズキャップ (1)
X-2021-944-1



“メモリースティック デュオ” (1)
(8MB)
(供給せず)



メモリースティック デュオ
アダプター (1)
(供給せず)



CD-ROM
「SPVD-012(V) USBドライバ」(1)
3-086-790-01

図面番号	部品コード	部　品　名
	3-087-937-01	取扱説明書 (PC)
	2-055-844-01	取扱説明書 (セット)

⚠印の部品，または⚠印付の点線で囲まれた部品は，
安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-1062-772-A	CD-516 BOARD, COMPLETE			
		**********			
		(IC5301,IC5302,IC5306 are not included in this COMPLEETE board.)			
		(IC5301,IC5302,IC5306 are included in PRISM ASSY (A-7012-866-A).)			
		< CAPACITOR >			
C5303	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C5304	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C5305	1-165-982-11	TANTAL. CHIP	10uF	20%	4V
C5306	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5307	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5308	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5309	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5310	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C5311	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C5312	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5313	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5314	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C5315	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C5316	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5317	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5318	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5319	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5320	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5321	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5322	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5323	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C5324	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5325	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5326	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5327	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5328	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5329	1-165-982-11	TANTAL. CHIP	10uF	20%	4V
C5330	1-165-982-11	TANTAL. CHIP	10uF	20%	4V
C5331	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C5332	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
		< CONNECTOR >			
CN5301	1-816-927-11	CONNECTOR, BOARD TO BOARD 80P			
		< FERRITE BEAD >			
FB5301	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB5302	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB5303	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB5304	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB5305	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB5306	1-414-760-21	FERRITE, EMI (SMD) (1608)			
		< IC >			
IC5301	not supplied	CCD IMAGER (ICX427GLA-13)			
		(IC5301 is not icluded in this COMPLETE board of CD-516.)			
IC5302	not supplied	CCD IMAGER (ICX427GLA-13)			
		(IC5302 is not icluded in this COMPLETE board of CD-516.)			
IC5303	6-701-755-01	IC AD80017AJRURL			
IC5304	6-701-755-01	IC AD80017AJRURL			
IC5305	6-701-755-01	IC AD80017AJRURL			
IC5306	not supplied	CCD IMAGER (ICX427GLA-13)			
		(IC5306 is not icluded in this COMPLETE board of CD-516.)			
		< COIL >			
L5301	1-469-757-21	INDUCTOR	10uH		
L5302	1-469-757-21	INDUCTOR	10uH		
L5303	1-469-757-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q5301	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q5302	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q5303	6-550-119-01	TRANSISTOR	DTC144EMT2L		
		< RESISTOR >			
R5301	1-218-990-11	SHORT CHIP	0		
R5302	1-218-990-11	SHORT CHIP	0		
R5303	1-218-990-11	SHORT CHIP	0		
R5304	1-218-990-11	SHORT CHIP	0		
R5305	1-218-990-11	SHORT CHIP	0		
R5306	1-218-990-11	SHORT CHIP	0		
	A-1062-788-A	FP-939 FLEXIBLE BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN001	1-816-927-11	CONNECTOR, BOARD TO BOARD 80P			
CN002	1-816-927-11	CONNECTOR, BOARD TO BOARD 80P			
	A-1062-789-A	FP-953 FLEXIBLE BOARD, COMPLETE			
		**********			
		< BATTERY >			
⚠BT1001	1-756-191-21	BATTERY, LITHIUM (SECONDARY)			
		< DIODE >			
D1004	8-719-070-93	DIODE TLAU1008 (T05, SOY) (CHARGE)			
		< RESISTOR >			
R1001	1-216-809-11	RES, CHIP	100 (1608)		
R1003	1-216-809-11	RES, CHIP	100 (1608)		

Be sure to read “Precautions upon replacing CCD imager” on page 4-9 when changing the CCD imager.

CCDイメージャの交換時はサービスマニュアル 4-10ページの“CCDイメージャ交換時の注意”を必ずお読みください。

CAUTION :
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

注　意
電池の交換は，正しく行わないと破裂する可能性があります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

Ref. No.	Part No.	Description
		< SWITCH >
S1001	1-771-138-82	SWITCH, KEY BOARD (FLASH)
S1002	1-771-138-82	SWITCH, KEY BOARD (RESET)
	A-1062-790-A	FP-954 FLEXIBLE BOARD, COMPLETE
		**********
		< CAPACITOR >
C001	1-162-966-11	CAP, CERAMIC 2200PF B1608
		< CONNECTOR >
CN001	1-817-705-11	CONNECTOR, FPC 10P
		< FERRITE BEAD >
FB001	1-500-444-11	FERRITE, EMI (SMD) (1608)
FB002	1-500-444-11	FERRITE, EMI (SMD) (1608)
FB003	1-500-444-11	FERRITE, EMI (SMD) (1608)
FB004	1-500-444-11	FERRITE, EMI (SMD) (1608)
FB005	1-216-864-11	CONDUCTOR, CHIP (1608) (Note)
		< JACK >
J001	1-691-737-41	JACK (SMALL TYPE) (MIC FRONT(PLUG IN POWER))
J002	1-691-737-31	JACK (SMALL TYPE) (MIC REAR(PLUG IN POWER)
	A-1062-791-A	FP-955 FLEXIBLE BOARD, COMPLETE
		**********
		< SWITCH >
S3001	1-786-179-31	SWITCH, PUSH (1KEY) (PANEL REVERSE)
	A-1062-792-A	FP-956 FLEXIBLE BOARD, COMPLETE
		**********
		< CAPACITOR >
C001	1-127-760-11	CAP, CERAMIC 4.7MF (2012)
		< DIODE >
D001	8-719-052-25	DIODE CL-200IR-X-TU-BC
D002	8-719-064-07	DIODE SML-310LTT86
		< FUSE >
F001	1-533-874-21	FUSE, MICRO (0.2A/24V)
		< IC >
IC001	8-742-221-00	HYB IC SBX3055-01
		< PHOTO INTERRUPTER >
PH001	8-749-016-83	IC GP1S092HCPI
PH002	8-749-016-83	IC GP1S092HCPI

Note : Resistors is mounted to the location where FB005 is printed.

Ref. No.	Part No.	Description
		< RESISTOR >
R003	1-216-805-11	RES, CHIP 47 (1608)
R004	1-218-945-11	RES, CHIP 220
	A-1062-793-A	FP-958 FLEXIBLE BOARD, COMPLETE
		**********
		< CONNECTOR >
CN6001	1-766-819-11	CONNECTOR, FPC (ZIF) 6P
CN6003	1-778-506-21	PIN, CONNECTOR (PC BOARD) 2P
		< RESISTOR >
R6001	1-216-826-11	RES, CHIP 2.7K (1608)
R6002	1-216-295-91	CONDUCTOR, CHIP (2012)
R6003	1-216-296-11	CONDUCTOR, CHIP (3216)
R6004	1-216-822-11	RES, CHIP 1.2K (1608)
R6005	1-216-202-00	RES, CHIP 1.5K (3216)
		< SWITCH >
S6001	1-771-138-82	SWITCH, KEY BOARD (BACK LIGHT)
S6002	1-771-138-82	SWITCH, KEY BOARD (DISPLAY/BATT INFO)
S6003	1-786-148-11	SWITCH, PUSH (1 KEY) (PANEL OPEN/CLOSE)
S6004	1-771-487-21	SWITCH, SLIDE (FOCUS)
S6005	1-771-731-21	SWITCH, SLIDE (AUTO LOCK)
	A-1062-768-A	JK-271 BOARD, COMPLETE
		**********
		< CONNECTOR >
CN5401	1-815-794-21	CONNECTOR (MULTIPLE) (AV MULTI CONNECTOR)
CN5402	1-794-962-11	CONNECTOR, SQUARE TYPE (USB 5P) ((USB))
CN5403	1-794-276-11	CONNECTOR, SQUARE TYPE 4P ((DV))
CN5404	1-816-595-31	CONNECTOR, FPC (ZIF) 23P
		< DIODE >
D5402	6-500-750-01	DIODE NSAD500H-T1-A
D5404	6-500-289-01	DIODE MAZW082H0LS0
		< FERRITE BEAD >
FB5401	1-414-760-21	FERRITE, EMI (SMD) (1608)
FB5402	1-414-760-21	FERRITE, EMI (SMD) (1608)
FB5403	1-414-760-21	FERRITE, EMI (SMD) (1608)
FB5404	1-414-760-21	FERRITE, EMI (SMD) (1608)
FB5405	1-414-760-21	FERRITE, EMI (SMD) (1608)
FB5406	1-469-667-21	FERRITE, EMI (SMD) (1608)
FB5407	1-469-667-21	FERRITE, EMI (SMD) (1608)
FB5408	1-469-667-21	FERRITE, EMI (SMD) (1608)
		< JACK >
J5401	1-793-995-11	JACK, SUPER SMALL TYPE ((LANC))
		< LINE FILTER >
LF5401	1-456-583-11	COMMON MODE CHOKE COIL
		< RESISTOR >
R5401	1-218-990-11	SHORT CHIP 0
R5402	1-218-965-11	RES-CHIP 10K 5% 1/16W
R5404	1-216-864-11	CONDUCTOR, CHIP (1608)

Ref. No.	Part No.	Description			
		< VARISTOR >			
VDR547	1-803-974-21	VARISTOR, CHIP (1608)			
	A-1062-774-A	LB-015 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C9400	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9401	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C9402	1-164-505-11	CERAMIC CHIP	2.2uF		16V
		< CONNECTOR >			
CN9400	1-816-688-31	CONNECTOR, FPC (ZIF) 29P			
CN9401	1-794-376-21	PIN, CONNECTOR 4P			
CN9402	1-815-067-21	CONNECTOR, FPC			
		< DIODE >			
D9400	6-500-875-01	DIODE E1S35-AW0C7-01-A3 (BACK LIGHT)			
D9401	8-719-074-67	DIODE EDZ-TE61-5.6B			
		< RESISTOR >			
R9400	1-218-971-11	RES-CHIP	33K	5%	1/16W
R9401	1-218-975-11	RES-CHIP	68K	5%	1/16W
R9402	1-218-971-11	RES-CHIP	33K	5%	1/16W
R9403	1-218-989-11	RES-CHIP	1M	5%	1/16W
	A-1062-771-A	LD-163 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1501	1-128-934-61	CERAMIC CHIP	0.33uF	10%	10V
C1503	1-128-934-61	CERAMIC CHIP	0.33uF	10%	10V
C1504	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1506	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1507	1-137-704-91	TANTAL. CHIP	10uF	20%	10V
C1508	1-164-936-11	CERAMIC CHIP	680PF	10%	50V
C1509	1-164-936-11	CERAMIC CHIP	680PF	10%	50V
C1510	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C1511	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C1512	1-125-926-91	TANTAL. CHIP	4.7uF	20%	6.3V
C1513	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1514	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C1515	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C1516	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C1517	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C1518	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C1519	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C1520	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C1521	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C1522	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1523	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1524	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
		< CONNECTOR >			
CN1501	1-815-329-11	CONNECTOR, FPC (ZIF) 11P			
CN1502	1-816-057-11	CONNECTOR, FPC (ZIF) 39P			
CN1503	1-816-924-11	CONNECTOR BOARD TO BOARD 40P			

Ref. No.	Part No.	Description			
		< IC >			
IC1501	8-759-359-49	IC NJM3414AV (TE2)			
IC1502	8-759-359-49	IC NJM3414AV (TE2)			
IC1503	8-759-058-45	IC NJM3403AV			
IC1504	8-759-058-45	IC NJM3403AV			
IC1505	8-759-478-92	IC TC7SET04FU (TE85R)			
IC1506	8-759-478-92	IC TC7SET04FU (TE85R)			
		< COIL >			
L1501	1-469-757-21	INDUCTOR	10uH		
L1502	1-469-757-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1501	8-729-042-26	TRANSISTOR	2SB1462J-QR (K8).SO		
Q1502	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q1503	6-550-235-01	TRANSISTOR	UNR32A500LS0		
Q1504	8-729-013-31	TRANSISTOR	2SA1588-OY-TE85L		
		< RESISTOR >			
R1501	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R1502	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1503	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1504	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R1505	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R1506	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1507	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1508	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R1509	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1510	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R1511	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1512	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R1513	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1514	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1515	1-218-979-11	RES-CHIP	150K	5%	1/16W
R1516	1-218-979-11	RES-CHIP	150K	5%	1/16W
R1517	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1518	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1519	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1520	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1523	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R1524	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R1525	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1526	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1527	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1528	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1529	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1530	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1531	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1532	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1533	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1534	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1535	1-208-931-11	METAL CHIP	68K	0.5%	1/16W
R1536	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R1537	1-208-931-11	METAL CHIP	68K	0.5%	1/16W
R1538	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R1539	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1540	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1541	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1542	1-218-965-11	RES-CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			
	A-1062-767-A	MS-220 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C6101	1-137-709-11	CERAMIC CHIP	4.7uF	10%	6.3V
		< CONNECTOR >			
CN6102	1-817-913-11	MEMORY STICK DUO CONNECTOR			
CN6103	1-817-705-11	CONNECTOR, FPC 10P			
		< DIODE >			
D6101	6-500-604-01	DIODE CL-270HR-C-TSL (MS ACCESS)			
		< RESISTOR >			
R6101	1-218-949-11	RES-CHIP	470	5%	1/16W
R6102	1-218-953-11	RES-CHIP	1K	5%	1/16W
	A-1062-775-A	PD-221 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C600	1-128-964-91	TANTAL. CHIP	100uF	20%	6.3V
C601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C602	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C603	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C604	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C605	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C606	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C609	1-113-986-11	TANTAL. CHIP	2.2uF	20%	25V
C610	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C611	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C615	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C616	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C617	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C618	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C619	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C627	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
		< CONNECTOR >			
CN602	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
CN604	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN606	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
CN608	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
CN609	1-816-179-11	CONNECTOR, FFC/FPC (ZIF) 22P			
		< DIODE >			
D604	8-719-050-42	DIODE RD3.3UM-T1B			
		< FERRITE BEAD >			
FB600	1-414-760-21	BEAD, FERRITE (CHIP) (1608)			
		< IC >			
IC600	8-752-115-66	IC CXA3622BR-T4			
		< COIL >			
L600	1-414-755-11	INDUCTOR	22uH		
L601	1-469-570-11	INDUCTOR	10uH		
L602	1-414-771-91	INDUCTOR	10uH		

Ref. No.	Part No.	Description			
		< TRANSISTOR >			
Q600	6-550-239-01	TRANSISTOR	DTA144EMT2L		
Q601	8-759-054-48	IC C010-PW2000SV-V110			
Q602	8-759-054-48	IC C010-PW2000SV-V110			
Q603	8-759-054-48	IC C010-PW2000SV-V110			
Q604	8-759-054-48	IC C010-PW2000SV-V110			
Q605	8-729-041-23	TRANSISTOR	NDS356AP		
Q606	8-729-427-12	TRANSISTOR	XP4111		
Q607	8-729-427-42	TRANSISTOR	XP4211		
Q612	8-759-054-48	IC C010-PW2000SV-V110			
Q613	8-729-042-26	TRANSISTOR	2SB1462J-QR (K8).SO		
		< RESISTOR >			
R600	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R601	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R602	1-218-949-11	RES-CHIP	470	5%	1/16W
R603	1-218-965-11	RES-CHIP	10K	5%	1/16W
R604	1-208-643-11	METAL CHIP	22	0.5%	1/16W
R605	1-218-990-11	SHORT CHIP	0		
R606	1-218-990-11	SHORT CHIP	0		
R607	1-218-990-11	SHORT CHIP	0		
R608	1-218-975-11	RES-CHIP	68K	5%	1/16W
R609	1-218-990-11	SHORT CHIP	0		
R610	1-218-990-11	SHORT CHIP	0		
R611	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R612	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R614	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R615	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R616	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R617	1-218-978-11	RES-CHIP	120K	5%	1/16W
R618	1-218-965-11	RES-CHIP	10K	5%	1/16W
R619	1-218-990-11	SHORT CHIP	0		
R620	1-218-977-11	RES-CHIP	100K	5%	1/16W
R621	1-218-965-11	RES-CHIP	10K	5%	1/16W
R622	1-218-979-11	RES-CHIP	150K	5%	1/16W
R623	1-218-990-11	SHORT CHIP	0		
R624	1-218-990-11	SHORT CHIP	0		
R639	1-218-990-11	SHORT CHIP	0		
R645	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R646	1-218-969-11	RES-CHIP	22K	5%	1/16W
R648	1-218-950-11	RES-CHIP	560	5%	1/16W
R649	1-218-937-11	RES-CHIP	47	5%	1/16W
R651	1-218-953-11	RES-CHIP	1K	5%	1/16W
R652	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R654	1-218-990-11	SHORT CHIP	0		
R655	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R656	1-208-957-11	METAL CHIP	820K	0.5%	1/16W
	A-1062-770-A	RP-241 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1401	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C1402	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2501	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2502	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C2503	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			
C2504	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2505	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C2506	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C2507	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2508	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2509	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2510	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2513	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2515	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2518	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2521	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2522	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C2523	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2524	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2527	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2528	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C2529	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C2530	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2531	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C2532	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2533	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C2535	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2536	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C2537	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2539	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2540	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C2541	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2542	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C2543	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C2544	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C2545	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6501	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C6502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6503	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C6504	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6505	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C6506	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C6508	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C6509	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6510	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6513	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6514	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
		< CONNECTOR >			
CN1403	1-817-708-11	CONNECTOR, FPC 16P			
CN1404	1-816-925-11	CONNECTOR BOARD TO BOARD 80P			
CN2501	1-817-705-11	CONNECTOR, FPC (LIF (NON-ZIF)) 10P			
CN2502	1-794-410-11	CONNECTOR, FPC (ZIF) 27P			
CN2503	1-794-410-11	CONNECTOR, FPC (ZIF) 27P			
CN6501	1-817-705-11	CONNECTOR, FPC 10P			
		< DIODE >			
D1401	6-500-289-01	DIODE MAZW082H0LS0			
D1402	6-500-289-01	DIODE MAZW082H0LS0			
		< IC >			
IC2501	6-705-676-01	IC TB6550FG (O, EB)			
IC6501	8-752-106-95	IC CXA3619R-T4			

Ref. No.	Part No.	Description			
		< COIL >			
L2501	1-469-570-11	INDUCTOR	10uH		
L2502	1-469-570-11	INDUCTOR	10uH		
L6501	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L6502	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
		< TRANSISTOR >			
Q2501	6-550-174-01	TRANSISTOR	2SA2030T2L		
Q2502	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
		< RESISTOR >			
R1401	1-218-990-11	SHORT CHIP	0		
R1402	1-218-990-11	SHORT CHIP	0		
R1403	1-218-990-11	SHORT CHIP	0		
R1404	1-218-990-11	SHORT CHIP	0		
R1405	1-218-947-11	RES-CHIP	330	5%	1/16W
R1406	1-218-947-11	RES-CHIP	330	5%	1/16W
R1407	1-218-947-11	RES-CHIP	330	5%	1/16W
R1408	1-218-947-11	RES-CHIP	330	5%	1/16W
R1409	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1410	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1411	1-218-947-11	RES-CHIP	330	5%	1/16W
R1412	1-218-947-11	RES-CHIP	330	5%	1/16W
R1413	1-218-947-11	RES-CHIP	330	5%	1/16W
R1414	1-218-990-11	SHORT CHIP	0		
R1415	1-218-990-11	SHORT CHIP	0		
R1416	1-218-990-11	SHORT CHIP	0		
R2502	1-218-935-11	RES-CHIP	33	5%	1/16W
R2503	1-218-935-11	RES-CHIP	33	5%	1/16W
R2504	1-218-990-11	SHORT CHIP	0		
R2506	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R2507	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R2508	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2509	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2510	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2511	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2512	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2513	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R2514	1-218-973-11	RES-CHIP	47K	5%	1/16W
R2515	1-218-946-11	RES-CHIP	270	5%	1/16W
R2516	1-218-990-11	SHORT CHIP	0		
R2519	1-218-990-11	SHORT CHIP	0		
R2520	1-218-990-11	SHORT CHIP	0		
R2522	1-218-990-11	SHORT CHIP	0		
R2523	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2524	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R2525	1-218-967-11	RES-CHIP	15K	5%	1/16W
R2526	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R2527	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R2528	1-218-969-11	RES-CHIP	22K	5%	1/16W
R2529	1-218-977-11	RES-CHIP	100K	5%	1/16W
R2530	1-218-953-11	RES-CHIP	1K	5%	1/16W
R2532	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6501	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6502	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6505	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6506	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6507	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R6508	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R6510	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R6512	1-208-715-11	METAL CHIP	22K	0.5%	1/16W

Ref. No.	Part No.	Description			
R6513	1-218-945-11	RES-CHIP	220	5%	1/16W
R6514	1-218-945-11	RES-CHIP	220	5%	1/16W
R6515	1-218-945-11	RES-CHIP	220	5%	1/16W
R6516	1-218-945-11	RES-CHIP	220	5%	1/16W
	A-1062-773-A	SE-149 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C520	1-135-201-11	TANTAL. CHIP	10uF	20%	4V
C521	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C522	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C523	1-135-201-11	TANTAL. CHIP	10uF	20%	4V
C524	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C525	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C526	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C527	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C528	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C529	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C530	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C531	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C532	1-127-760-11	CAP, CERAMIC	4.7MF (2012)		
		< CONNECTOR >			
CN521	1-815-330-11	CONNECTOR, FPC (ZIF) 15P			
CN522	1-779-329-11	CONNECTOR, FFC/FPC 10P			
		< DIODE >			
D521	6-500-289-01	DIODE MAZW082H0LS0			
		< IC >			
IC520	8-759-489-19	IC uPC6756GR-8JG-E2			
		< COIL >			
L520	1-469-570-11	INDUCTOR	10uH		
		< RESISTOR >			
R520	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R521	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R522	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R523	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R524	1-218-989-11	RES-CHIP	1M	5%	1/16W
R525	1-218-965-11	RES-CHIP	10K	5%	1/16W
R526	1-218-965-11	RES-CHIP	10K	5%	1/16W
R527	1-218-989-11	RES-CHIP	1M	5%	1/16W
R528	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
		< COMPOSITION CIRCUIT BLOCK >			
RB520	1-234-379-21	RES, NETWORK 22KX4 (1005)			
		< SENSOR >			
SE520	1-476-807-31	SENSOR, ANGULAR VELOCITY(PITCH SENSOR)			
SE521	1-476-807-41	SENSOR, ANGULAR VELOCITY(YAW SENSOR)			

Ref. No.	Part No.	Description			
	A-1062-769-A	ST-106 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5601	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C5602	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C5603	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5604	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
⚠C5605	1-100-830-11	CAP, ELECT	70uF		310V
C5606	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5607	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
		< CONNECTOR >			
CN004	1-779-335-21	CONNECTOR, FFC/FPC 22P			
CN5601	1-815-331-11	CONNECTOR, FPC (ZIF) 19P			
		< DIODE >			
D5601	8-719-073-01	DIODE MA111-(K8).S0			
⚠D5602	6-500-237-01	DIODE HAU160C030TP			
		< IC >			
IC5601	6-703-635-01	IC TND721MH5-S-TL-E			
		< COIL >			
L5601	1-412-027-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q5601	8-729-048-75	TRANSISTOR	CPH3109-TL-E		
Q5602	8-729-053-74	TRANSISTOR	CY25AAJ-8-T13-F00R		
		< RESISTOR >			
R5601	1-218-937-11	RES-CHIP	47	5%	1/16W
R5602	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5603	1-218-948-11	RES-CHIP	390	5%	1/16W
R5604	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R5605	1-216-864-11	CONDUCTOR, CHIP	(1608)		
R5607	1-218-937-11	RES-CHIP	47	5%	1/16W
R5608	1-218-989-11	RES-CHIP	1M	5%	1/16W
		< TRANSFORMER >			
⚠T5601	1-437-532-11	TRANSFORMER, DC-DC CONVERTER			
		DB-017 BOARD, COMPLETE			
		**********			
		VC-366 BOARD, COMPLETE SERVICE			
		**********			

Electrical parts list of the DB-017 board and VC-366 board are not shown.
Pages from 6-25 to 6-36 are not shown.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

DCR-HC1000/HC1000E

RMT-831

SONY

LEVEL 2

SERVICE MANUAL

Ver 1.2 2005.06

DCR-HC1000

US Model
Canadian Model
Korea Model
Japanese Model

DCR-HC1000E

AEP Model
UK Model
East European Model
Australian Model
Chinese Model

DCR-HC1000/ HC1000E

E Model
Tourist Model

SUPPLEMENT-1

File this supplement-1 with the Service Manual.

- Change of the repair parts list.

5 REPAIR PARTS LIST

5-1. EXPLODED VIEWS

: Changed portion

Page	Before Change			After Change		
5-13	**5-1-11. TOP CABINET SECTION**					
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	517	3-051-348-01	RETAINER (MIC), HARNESS	517	2-055-842-01	RETAINER (MIC), HARNESS

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2005F1600-1
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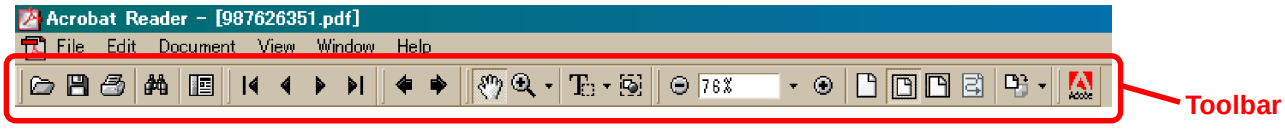
ENGLISH JAPANESE

[Description of main button functions on toolbar of the Adobe Acrobat Reader Ver5.0 (for Windows)]



Printing a text

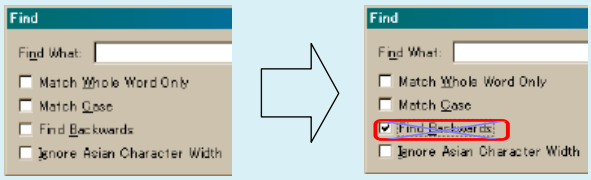
1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

Application of printing:
To set a range to be printed within a page, select the graphic selection tool and drag on the page to enclose a range to be printed, and then click the Print button.

Finding a text

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

Application to the Service Manual:
To execute "find" from current page toward the previous pages, select the check box "Find Backward" and then click the "Find".



3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

Application to the Service Manual:
The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.
Note: The find function may not be applied to the Service Manual depending on the date of issue.

Switching a page

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

Reversing the screens displayed once

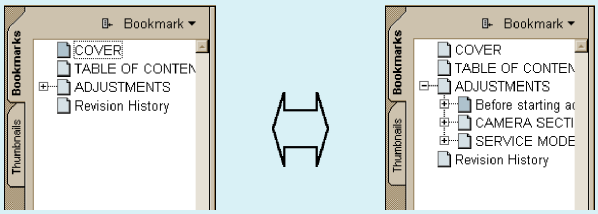
- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

Application to the Service Manual:
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

Moving with link

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

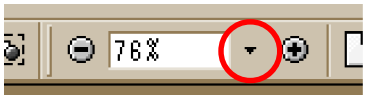
Moving with bookmark:
Click an item (text) on the bookmark pallet, and you can move to the link destination. Also, clicking can display the hidden items.
(To go back to original state, click)



Zooming or rotating the screen display

"Zoom in/out"

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click or for zooming in or out.



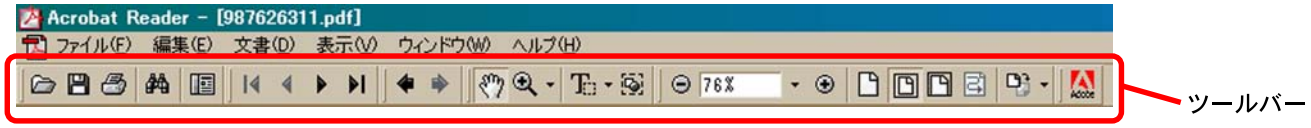
"Rotate"

- Click rotate tool , and the page then rotates 90 degrees each.

Application to the Service Manual:
The printed circuit board diagram you see now can be changed to the same direction as the set.

ENGLISH JAPANESE

【Adobe Acrobat Reader Ver 5.0(for Windows)ツールバー内にある主なボタンの機能説明】



文章を印刷する

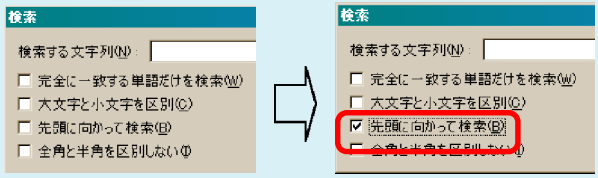
1. 印刷ボタンをクリックする。
2. プリンター、印刷範囲、印刷部数、および他のオプションを指定して「OK」をクリックする。

印刷の応用：
ページ内で印刷したい範囲を設定するには、グラフィック選択ツールを選択し、ページ上をドラッグして印刷したい範囲を囲んでから印刷ボタンをクリックする。

文章内を検索する

1. 検索ボタンをクリックする。
2. 検索したい文字列をテキストボックスに入力して「検索」をクリックする。(必要に応じて検索オプションを指定する)

サービスマニュアルへの応用：
現在のページから前ページに向かって検索する場合は「先頭に向かって検索」のチェックボックスを選択してから「検索」をクリックする。



3. 検索ダイアログボックスをもう一度開き、「次を検索」をクリックすると次に出てくる一致文字列を検索することができる。(前回入力した文字列が、テキストボックスにそのまま表示されている)

サービスマニュアルへの応用：
文章内にある図面ページ(ブロックダイヤグラム、回路図、プリント図)および部品表ページなどは、この検索機能を使って部品検索することができる。例えば、ブロックダイヤグラム上でICのRef. No.を検索し、「次を検索」を続けることによって回路図、プリント図上にあるICのRef. No.へ次々と移動する。
注意：発行年月日によって検索できない場合もあります。

ページを切り換える

- 最初のページに移動する場合、をクリックする。
- 最後のページに移動する場合、をクリックする。
- 前のページに移動する場合、をクリックする。
- 次のページに移動する場合、をクリックする。

一度表示した画面へ逆戻りする

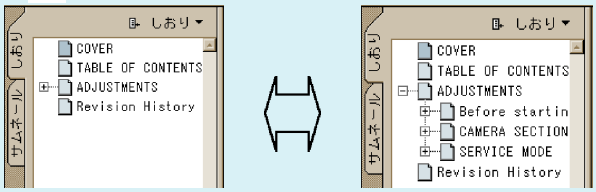
- 前の画面(操作)へ1つずつ逆戻りする場合、をクリックする。
- 戻した画面(操作)を1つずつ前に進める場合、をクリックする。

サービスマニュアルへの応用：
回路図とプリント図を行き来できるので電圧チェックに便利です。

リンクを使用して移動する

1. 手のひらツール、ズームツール、テキスト選択ツール、グラフィック選択ツールのいずれかを選択する。
2. 文章内のリンクのある場所(表紙および章目次ページのボタン、外し方のフローページ、図面ページでは文字が青色になっているところなど)にポインタを置くと、ポインタが人差し指の形「」に変わる。
3. そのままリンクをクリックする。(リンク先へ移動する)

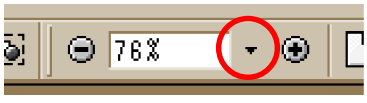
しおりを利用して移動する：
しおりパレット上の項目(テキスト)をクリックするとリンク先へ移動することができる。また、「」をクリックすると隠れている項目を表示することができる。
(「」をクリックすると元に戻る)



画面の表示を拡大、縮小または回転させる

「拡大/ 縮小」

- 倍率ボックスの三角矢印ボタンをクリックし、表示倍率を選択する。または、をクリックしても使えます。



「回転」

- 回転ツールをクリックすると、ページが90度ずつ回転する。

サービスマニュアルへの応用：
見ているプリント図をセットと同じ向きに変えられます。

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2004.06	Official Release	—	—
1.1	2004.07	Correction-1	• Correction of Printed wiring board • Correction of Exploded views S.M. correction: Page 4-105, 5-12, 5-14	Yes
1.2	2005.06	Supplement-1 (PV04-084)	Change of the repair parts list.	No